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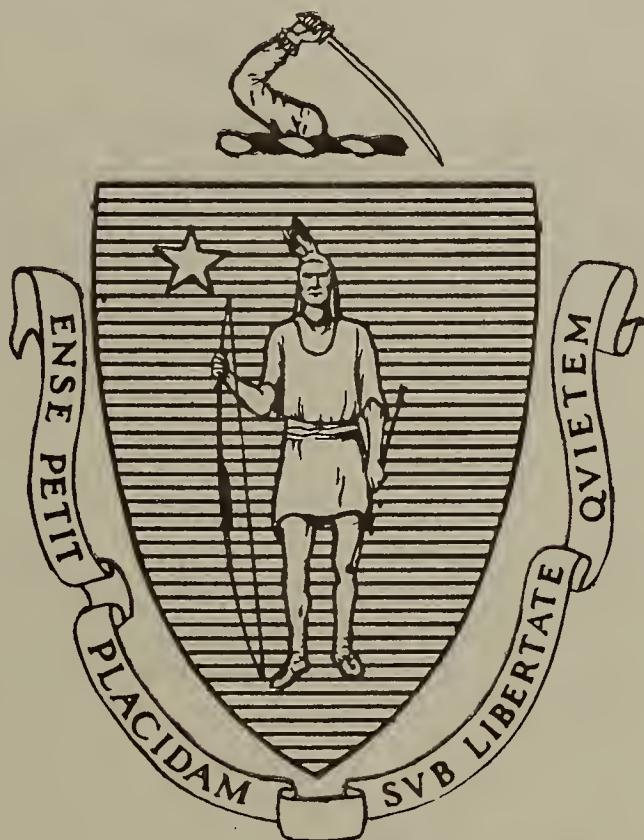
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IMPROVING HIGHWAY BUSINESS AREAS

CASE STUDY

WILLIAMSTOWN, MASSACHUSETTS

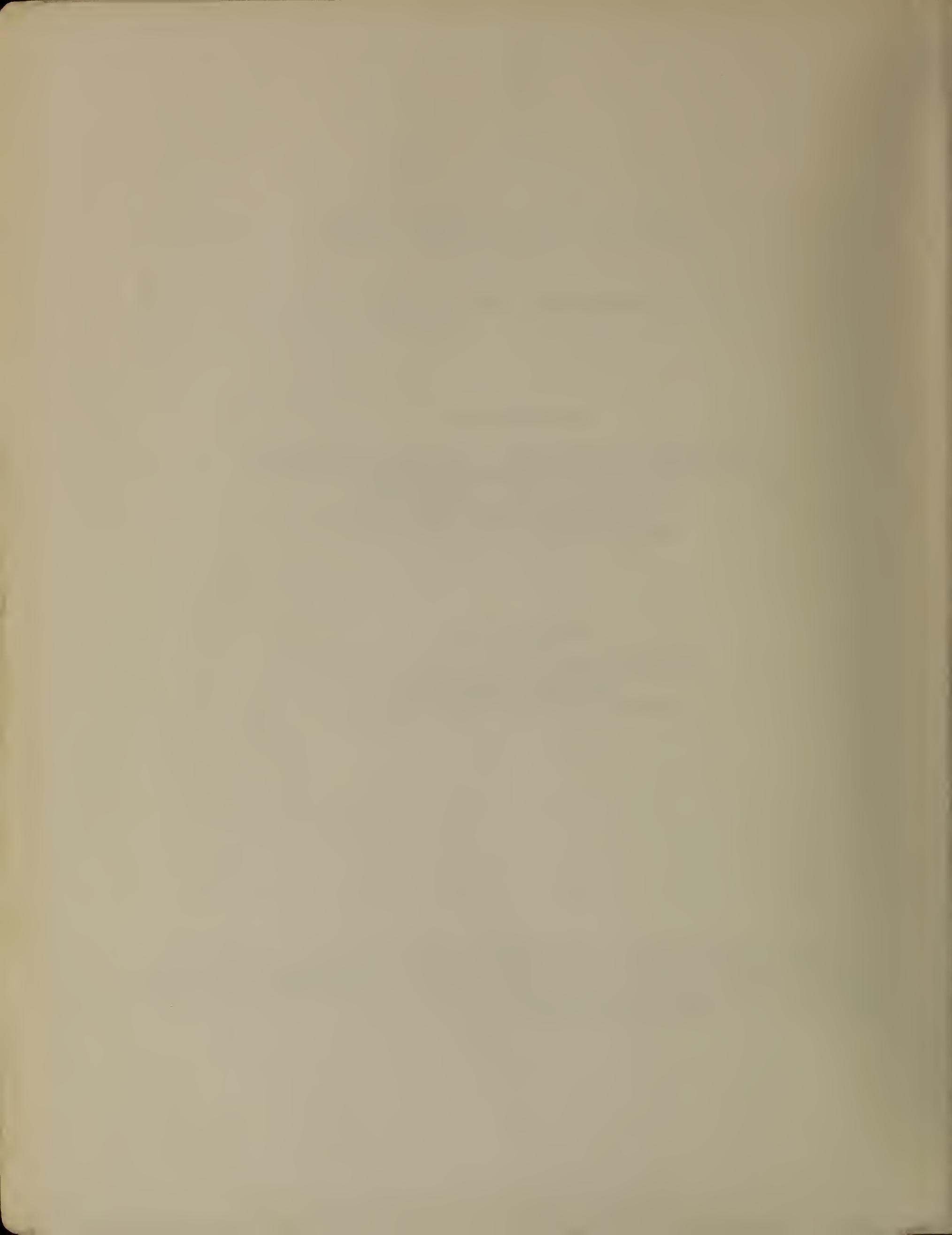
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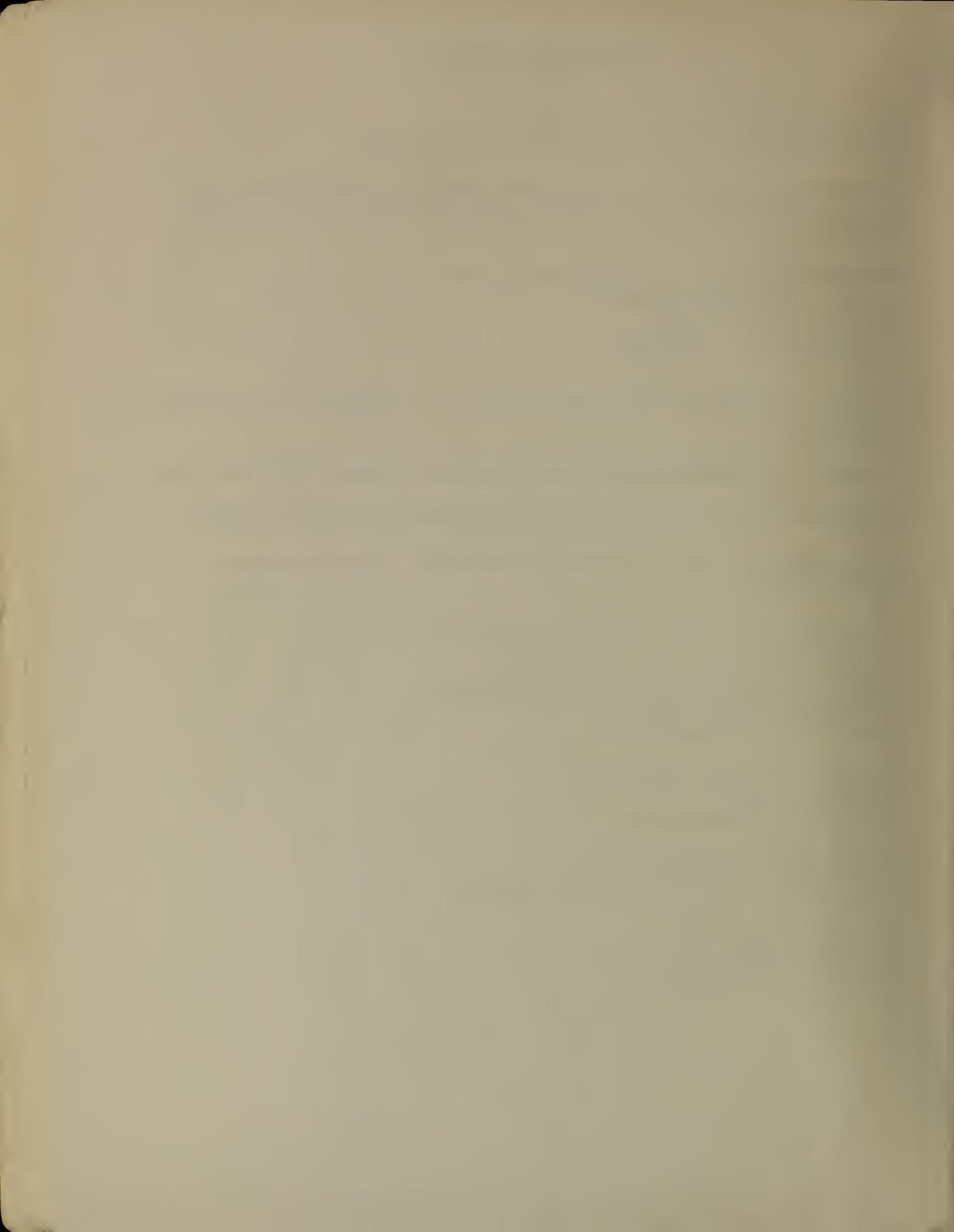


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PREFACE

This report is part of the local assistance series prepared by the Office of Local Assistance. The local assistance series consists of reports prepared as a result of extensive work conducted by the Office in various localities throughout the Commonwealth. To date, fifteen projects have been undertaken. While these studies are conducted for specific communities, they are designed to be of value to other cities and towns faced with similar planning and management issues. A list of reports prepared by the Office appears on the back cover of this report.

In addition to the series of in-depth studies, the Office provides other services to local governments. The Office assists local governments in the solution of problems related to community development, planning, management and intergovernmental relations. The staff includes specialists in land use management, planning, public administration, municipal finance and related fields. To deliver its services, the Office functions through three sections: Local Liaison; Community Planning and Management; Municipal Advocacy and Policy.

The Local Liaison section is staffed by municipal field representatives assigned to specific communities who maintain regular contact with local chief executives. The section also maintains a toll-free telephone service to respond to inquiries by individual communities. The Community Planning and Management section provides community development planning and land use management services and prepares in-depth studies to assist individual communities in solving significant planning and management problems. The Municipal Advocacy and Policy section identifies and investigates issues of common concern to all communities, and disseminates relevant information to municipalities. The staff is responsible for developing policy positions for the Governor that embody the municipal perspective on issues which affect local government. The section also assists the Community Planning and Management section in the preparation of in-depth studies.

Improving Highway Business Areas, Number 15 in the local assistance series, deals with a problem which accompanies growth and urban sprawl -- the highway business districts. These areas, dependent on the automobile for survival, generally are the result of disjointed incremental land use decisions and rarely are developed according to a plan.

PROBLEM STATEMENT

✓ Most highway business districts in Massachusetts suffer from a lack of unity within them and poor connections to the traffic arteries that serve them. ✓ The term "strip commercial" has become synonymous with highway business. ✓ Uncoordinated development, one-upsmanship and poor regulatory controls share the blame for what ails highway business. Route 2 on the east side of Williamstown is an example of such an area.

Solutions are available, however, and are beginning to be used to improve strip commercial areas and to prevent further degradation of the area. Responsible marketing chains are being sensitized to the desirability of aesthetically-attractive retail outlets and municipal officials are realizing that expansion of the local tax base includes reasonable controls to insure the longevity of the asset. Citizens and business interests alike recognize the need to improve the environment and to remove threats to the tourist industry which is dependent on New England charm.

STUDY DESIGN

This study is designed to achieve the following objectives:

- to develop some basic steps and techniques to promote sound development of new highway business districts;
- to develop means to upgrade existing highway business districts; and
- to provide local planning groups and decision makers in Massachusetts with a few basic tools to be utilized to improve often neglected situations.

A case study approach is utilized applying concepts and solutions to Route 2 in Williamstown. Highway business strips are discussed in general in each chapter, followed by specific application to Williamstown, a format desired by the Town and one which provides clarity.

The study area is classified as low to medium density. Although each business strip differs and requires consideration of unique characteristics, the approach to improvements is the same and thus this report provides an action guide.

The result is design standards, zoning provisions and review procedures, guidelines for analyzing existing and proposed highway business development, and a mechanism for a clearer understanding of private, municipal and state responsibilities.

FUTURE STUDY

This study presents concepts which can be adapted to other strip areas. Additional studies should address such items as:

- Industrial Strips: light industry, warehousing, heavy equipment;
- High Density Strips: multiple use structures, mass transit service, high rise;
- Highway Design: grade, lane variation, traffic volumes, peak hours volume;
- Construction Standards: pavement, drainage;
- Taxation: betterment assessment, tax incentives.

It is anticipated that this study will provide a point of departure for such additional studies.

3C

The Department of Public Works has been consulted regarding policies, programs and funding during the course of this study. Information and comments have been incorporated as received from the Department. Unfortunately a response to some specific questions was not available at the time of report completion. Therefore, the reader is reminded that in every case, the Department must be consulted about policies, programs and funding, and that the 3C process must be initiated. The 3C requirement, established by the 1962 Federal Highway Act, is for a continuing, cooperative and comprehensive planning process in every urban region with a population over 50,000.

Any community desiring further information on the subject areas covered in any of the reports in the local assistance series should contact the Office of Local Assistance.

We request readers to complete the evaluation form appended to this report so that we may benefit from your experience as to the value of this publication.

STUDY INTRODUCTION

Highway business areas, often referred to as commercial or highway "strips", are a characteristic of the American automobile-dominated urban scene. They are customarily linear developments on one or both sides of a heavily travelled street. They have developed incrementally without benefit of overall planning as traffic has increased. Their flaws as well as their reflection of mid-20th century America, are well-documented, especially by Grady Clay and by Southworth and Lynch. (See Bibliography)

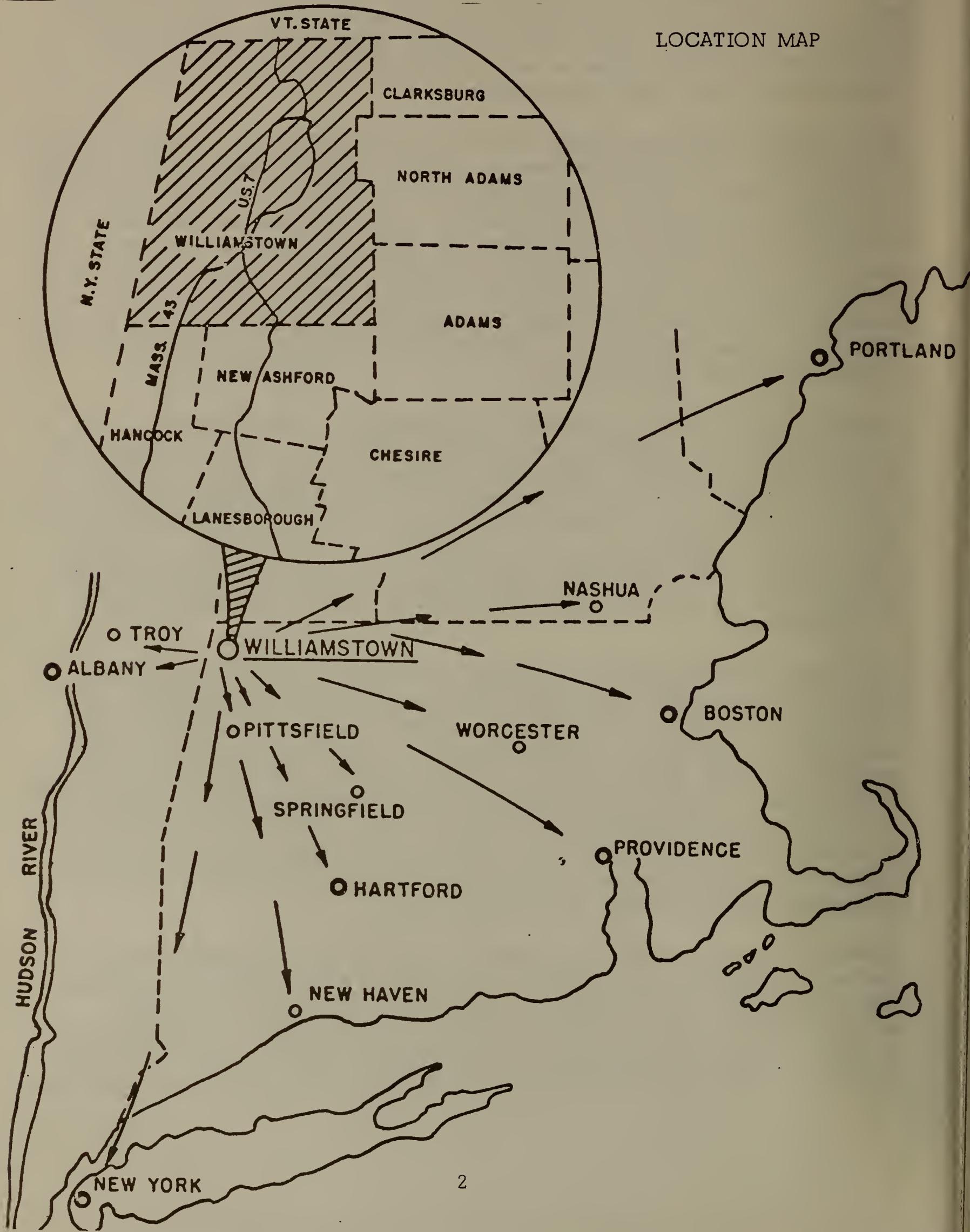
Many suburban commercial strips have had their beginnings on old inter-community rural highways. For a particular reason, usually related to traffic on the highway, a business begins. In pre-automobile days it may have been a wayside inn. Today, it is a motel or gas station. If one business proves successful, more follow. A typical sequence following the motel or gas station is a fast-food franchise, truck stop if on a trucking route, a second gas station or motel, and a gift or souvenir shop selling local in-season goods such as freshly-pressed apple cider or maple syrup. If there is even a small resident population in the vicinity of this incipient strip, then a small "quick-mart", package store and perhaps a second fast-food or diner will in turn be established.

Highway business areas are intended to be used by the man on wheels. They are so dependent on the automobile for customers that there is little or no provision for pedestrians or bicycles. Many access points, and large signs competing for the driver's attention, create safety hazards. The individual businesses use large areas and are generally unrelated to one another. As a result these areas are usually congested, unattractive and are not examples of good land use planning or environmental design. Moreover, these highway businesses are usually located on access roads to a community and unavoidably establish a shoddy image of the city or town.

Some communities, recognizing the problems posed by commercial strips, have been able to adopt land use controls which prevent strips from developing or which control the manner in which they develop. However, for most communities having existing strips, the task of mitigating the problems has not been addressed. It is the purpose of this study to develop a methodology for improving existing strips. For illustrative purposes a case study application is made to a one and half mile stretch of Route 2 in Williamstown, Massachusetts, from the North Adams City line westerly to Water Street. This area serves as the introduction to Massachusetts for tourists entering the Commonwealth from Vermont and Northern New York State. (See Location Map)

Williamstown is one of the Commonwealth's most beautiful and historic communities, characterized by unspoiled mountains, with the village and college community nestled in the valley. This area with shade trees, fine college buildings and residences and vistas of the mountains comes to an abrupt halt at the Green River. It is connected to North Adams by a finger or strip of business along Route 2 with little landscaping, garish signs, discontinuity and poor traffic

control. The strip is bounded by the Hoosac River on the north and the mountains on the south. In limited areas it is interrupted by residences. The characteristics and problems attendant with the strip will be addressed in this Study.



PART ONE - ANALYSIS

MAJOR CHARACTERISTICS

FORM AND FUNCTION

It is probably best to characterize "highway business areas" by physical characteristics, rather than by type of business. It is not so much the type of business (most anything seemingly can be located in a highway strip) but that such businesses perform a different function (or are used differently) when they are on a highway rather than in a center.

Southworth & Lynch (1974)⁽¹⁾ have identified the most significant of the characteristics of the strip as:

- Automobile orientation.
- Building "setback" from street.
- Parking area between building and street.
- Free-standing buildings with entrances facing streets.
- Individual business entrances and exits to the outside.
- Highly competitive signing.

Every zoning ordinance and by-law that allows strip commercial development contributes to these characteristics. Zoning imposes setback, parking, and "yard" requirements upon new businesses, all of which require a development form quite unlike that of older business districts. Thus, to some extent, zoning regulations themselves have caused the strip to be something that we now consider a problem.

The automobile orientation of the strip, its physical form as described above, and placement along a high-volume, "through traffic" connector rather than at a destination result in a particular type of activity. This activity is one that:

- Emphasizes a single-purpose trip or stop. A multi-purpose trip may require multiple stops;
- Causes a lack of interrelationship among each establishment's physical setting;
- Requires short trip times, each perhaps twenty minutes or less, and

(1) Michael Southworth and Kevin Lynch, Designing and Managing the Urban Strip, Working Paper No. 29, Joint Center for Urban Studies, Cambridge, 1974.

not the three or four hours as in a central business district or shopping mall;

- Encourages convenience-type shopping; that is, several trips per day, as the need arises, rather than one-a-day to accomplish all errands;
- Intercepts driver attention for impulse buying;
- Lacks the efficiency of functional clustering of business.

The single-purpose, impulsive, and convenience nature of these trips supports the physical character of the strip in its high visibility and the single-purpose, free-standing nature of its buildings.

TYPES OF BUSINESS ACTIVITIES

The business activities in a highway business area customarily fall in the following categories:

1. Automobile service - gas stations; automobile supplies; automobile and truck equipment repairs or sales; car washes and truck stops.
2. Tourist service - restaurants; fast-food places; motels and gift shops. These services may also be used by non-transients.
3. Bulk sales - lumber and building supplies; fuel oil sales; equipment.
4. Retail sales requiring large parking areas and large trade areas - shopping centers; drive-in theaters; bowling alleys; discount houses.
5. Retail sales intended to divert the automobile shopper before reaching a downtown business area - high volume sales such as drive-in banks; personal services such as cleaners or "fotomats".
6. Retail sales which require large floor area - furniture and appliances; nursery or factory outlets.

Each of these categories is represented in the study area in Williamstown:

- Automobile Service: gas stations - (Shell, Exxon, Texaco and Mobil); a Chevrolet car dealer; a car wash.
- Tourist Service: motels - (The Four Acres, The Willows and Chimney Mirror); restaurants - (Howard Johnson's, A&W, The British Maid and Carrolls Restaurant).
- Bulk Sales: Mercury Mobile Home Sales; Denelli's (Deere Equipment).

- Retail Sales:
 - retail sales requiring large parking areas and large trade areas - shopping centers (Colonial and Grand Union Shopping Centers).
 - retail sales intended to divert the shopper before reaching downtown - the Williamstown National Bank; Dox's Drugstore; the Cumberland Farm Store.
 - retail sales which require large floor area - Brooks Discount and Grand Union Stores.

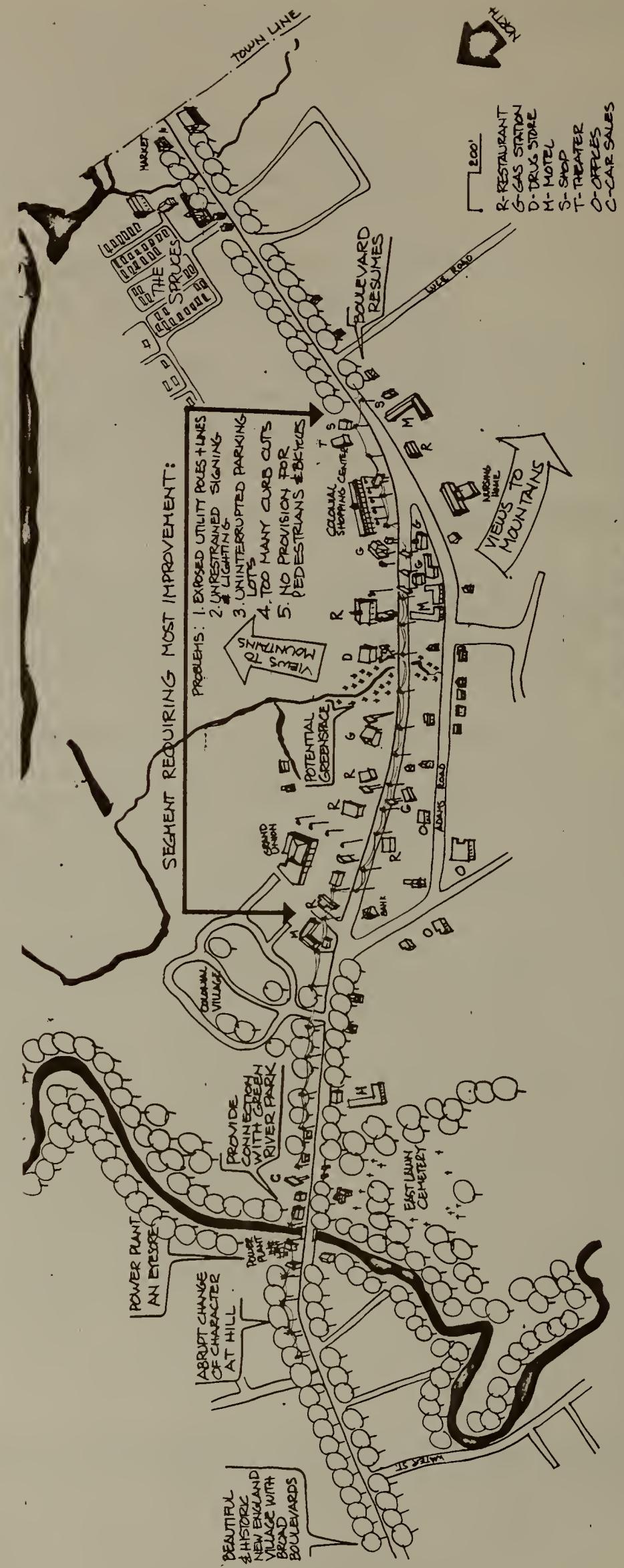
There are some cases which fall in the above categories customarily located in a highway strip which are not currently found on Route 2, Williamstown (e.g., funeral homes, nursery sales). It is assumed that if there were local demand, entrepreneurs would examine the area for sites.

OWNERSHIP AND ROLE OF ABSENTEE OWNERS

Although all businesses in a commercial strip can be owned by local residents, many of the characteristic uses are chains and/or franchise operations. This is particularly true of automobile sales and services, motels and fast-food services. Such operations are included on the Route 2 strip in Williamstown.

It is likely that policies established by the chains regarding building and site design have been made for efficiency and identity rather than for relationship to surrounding land use or community programs. This presents another dimension to the problem. That is, in the search for profit, franchising chains have reduced their design variables to a minimum, thus insuring low investment and maintenance costs and high customer recognition. This design concept has been so refined that the franchise may be the "culmination or common denominator" that zoning controls have dictated. It is not unknown for company policy to hinder a local franchisee from participating in a community effort although that attitude is changing. On the other hand, many corporations encourage good design.⁽¹⁾ Although absentee owners frequently are not responsive to local needs and desires, the chains are becoming more aware, and local managers are being encouraged to participate at the local level. An insistence upon a particular architectural style or sign design is also waning on the part of the chains. For example, McDonald's no longer insists on the arch or free-standing sign and has become a leader in good design. What localities need to do is to encourage a better understanding by the chains of the community of which they are becoming a part. To improve their competitive position the chains need to upgrade their retail outlets and deliver the message locally as to what may be expected at other outlets.

(1) Corporations customarily found on a strip were written to ascertain their design policies. See Attachment A.



WILLIAMSTOWN: ROUTE 2 / ANALYSIS OF PROBLEMS & POTENTIALS

MICHAEL & SUSAN SOUTHWORTH

LAND USE CONTROLS

The use of land on a highway strip may be controlled by corporate policy, particularly through policies and standards for franchise operators, and by basically two levels of government, state and local. In Massachusetts, the local level deals with the site itself; the State, through the Department of Public Works, deals with connections to the State highway system. The State Office of Environmental Affairs would also become involved for an activity that might harm the environment before any State agency (DPW) could issue a permit. Regional planning agencies may deal indirectly with highway strip commercial uses by offering technical advice as to how local communities can plan and regulate this particular type of land use.

Each city or town may deal with a commercial strip in basically three ways. Zoning may be used to determine the permitted uses and density and in some case amenities. Subdivision regulations may govern the design and certain construction specifications, if the use involves the division of land. Sign by-laws, design review boards, environmental review procedures, earth removal and other local by-laws may also govern.

In addition, the administration of programs providing State and Federal aid for street improvements may provide impetus to the growth of highway strips. A well-constructed and maintained highway attracts growth; conversely a poor one deters growth.

The need for proper land use controls of commercial districts is underscored by two basic phenomena of this type of land use. These are as follows:

1. Unequal deterioration

Piecemeal development of highway frontage with different types of uses in different time frames leads to unequal deterioration which is difficult to combat in a unified manner.

2. Extended blight

A highway strip, as opposed to a concentrated center, has more of an opportunity to affect the surrounding land uses. These surrounding uses are almost always residential, particularly in areas where a highway approaches a town, the likely place for strip commercial uses. There are exceptions, but residential uses behind highway commercial strips is the rule. Thus, more residential uses are adversely affected by highway strips than by central or concentrated areas. In Williamstown the adjacent uses include farming, open space and residences.

CIRCULATION

Strip commercial uses are generally located on major local routes, sometimes on "truck routes" or numbered highways, and frequently on a combination of all of these. Thus, the roads or streets on which they are located carry "through" traffic (trucks and automobiles) and local traffic. Traffic, and hence shopping, is usually heaviest during commuting hours and in most areas during seasonal peaks.

As highway strips develop, traffic circulation gradually deteriorates and the possibilities for traffic accidents increase geometrically. For instance, at a three-way intersection, there are potentially six points of conflict. At a four-way intersection, there potentially are twenty-four points; in strip commercial areas, the potential is virtually limitless.

High turning volumes caused by numerous curb cuts disrupt the flow of traffic and cause drivers to become impatient, further deteriorating circulation and safety.

APPEARANCE

There are certain characteristics of highway strip commercial activity that are universally perceived as cluttered and disorganized to the point of confusion, competitive and distracting to the detriment of traffic safety, and barren and lifeless enough during off-business hours to invite burglary and vandalism.

The businesses, although perhaps neat and attractive on an individual basis, in the aggregate appear to be unattractive or unpleasing, to be discontinuous and to have no relation to the community as a whole.

Large illuminated signs that are usually designed for high speed traffic dominate most strips. The irony is that where most of the shopping in these strips is done, the traffic is the slowest; therefore, the size of the signs is even more inappropriate.

Utility wires and poles are usually located overhead. Lighting is often glaring and frequently illuminates adjacent residential and non-residential areas. Poles and fixtures are often incompatible with the community character. The lighting often conflicts with traffic signals and/or confuses the driver because of distraction and colors, thus creating safety hazards.

Vast grey parking lots are usually unrelieved by landscaping. Space markings and directions are often omitted. Drainage is frequently poor. Little or no landscaping characterizes many of the strip areas.

A high rate of business turnover on most strips adds to the appearance of under-utilization and confusion. In some instances a short business life is anticipated, and built-in obsolescence occurs.



Utility poles, vast unlandscaped parking areas and lack of traffic controls create stark unpleasing effect for the viewer.

Historic pastoral view interrupted by commercial development.



There is unfortunately no one solution to all of those matters. What is required is a unified public/private recognition and joint solution.

RETAIL TRADE AREAS AND PATRON CHARACTERISTICS

The retail trade area of a highway business area will vary with the size and location of the area. However, it usually includes transients, tourists and residents of nearby communities. The persons who patronize a highway strip are:

1. People passing through the area on business, commuting, or as tourists.
2. Local people who must come to the commercial area for retail services, which happen to be on the strip but do not need to be, such as a drug store, or for so-called "drive-in" services or automotive business.
3. Local persons diverted on their trip downtown by retail attractors (e.g., discount houses), services or easy parking.
4. Persons from the adjacent area who need the services provided on the strip.

In Williamstown it is estimated that: (1)

- sixty (60) percent or more of the patrons reside in Williamstown;
- twenty (20) percent of the patrons reside in North Adams, Clarksburg, or southern Vermont;
- twenty (20) percent of the patrons are tourists.

These figures vary somewhat with the season and with the type of business. For example, the gasoline station owners estimate that seventy (70) percent of their business is from Williamstown residents. By contrast, the motel business is ninety-five (95) percent tourists. The peak season for almost all businesses is July and August when most of the tourist business is added to local business. The Appalachia Trail passes through Williamstown. Many bikers stop to purchase food or personal services on Route 2. In the tourist season the Retail Trade Area includes patrons from most of the U.S. On a daily basis it is limited to residents of southern Vermont, the northwest sector of North Adams and Williamstown itself, at best 20,000 persons.

(1) Survey of business men on the strip. See Attachment B for letter and list of businesses which received the letter.

PHYSICAL PROBLEMS

HIGHWAY SAFETY

Highway safety has been qualitatively discussed. In Williamstown, a traffic survey was undertaken for the TOPICS Project. Table 1 contains vehicular volumes observed during the study period and accident breakdowns for the years 1969 and 1970 on Route 2 in the area of the commercial strip.

(1)

TABLE 1

SUMMARY OF EXISTING TRAFFIC & ACCIDENTS

Intersection	Accidents: 1969 - 1970					
	Vehicular Volumes		No. of Accidents With Personal Injury			
	24-Hour (2) ADT Volume	Peak-Hour Vol. By Approach	Total	Veh.	Ped.	Injury
Route 2 at Water Street	13,000-15,500 6,700	493-502 238	12	12	0	0
Route 2 at Adams Road	15,500-16,000 ---	---(3) ---	11	11	0	0
Route 2 at Shopping Ctr.	15,500-16,000 ---	--- ---	24	24	0	3
Route 2 at Luce Road	15,200-16,000 1,300	--- ---	6	6	0	1

By 1974 the ADT at Water Street (Route 43) and Main Street (Route 2) was 13,600, and at Route 2 and the North Adams City Line it was 28,200. The TOPICS Study projected a townwide traffic increase of 22.5 percent by 1977. The most frequent type of accident was in connection with left-hand turns. The problem, which is most acute at Carrolls Restaurant and the Grand Union Shopping Center, is compounded by poor visibility at the intersection of Route 2 and Stratton Road. The Policy Chief feels that islands are necessary to relieve the accident problem and potential hazards. (4)

(1) Source: Edwards and Kelcey, Inc., TOPICS Project Report, Boston, 1972.
(2) ADT = Average Daily Trips.
(3) No count taken.
(4) Interview, December 12, 1976.

For the purposes of the present study, the abnormally high number of accidents on Route 2 at the Shopping Center, compared with other locations on Route 2, is assumed to be the result of the numerous, uncontrolled traffic movements possible at this location. This is a characteristic of strip commercial development cited previously.

Another characteristic, low number of accidents with personal injury, is typical of strip commercial developments. Since most traffic moves fairly slowly through a strip with uncontrolled access and no median barrier, particularly at peak hour, most accidents will occur at slow speeds. Thus, there will be more rear-end and fender-bender type accidents than there would be high-speed collisions with fixed objects or out-of-control collisions.

Also, the relative lack of pedestrian activity at the roadside, compared to that in parking lots, means fewer pedestrians will become involved in roadside accidents. With the rising popularity of bicycles and now mopeds, one can expect to see a new variety of accident; strip commercial areas are prime targets since these areas are accessible to such vehicles and automobile drivers are not accustomed to such competitors within the right-of-way.

Another highway safety feature often ignored is area and sign lighting. Serious problems exist where the parking area for strip commercial uses is brighter than that for the street itself. The driver is distracted by the glare from these overhead lights and signs, which often obscure and visually drown out traffic control devices, warning and directional signs.

Snowplowing and storage can be a problem. A lack of recognition for the need to periodically handle large volumes of snow, particularly in New England and obviously so in Williamstown, has at times led to potentially dangerous situations. Improper snowplowing cuts down on available parking space, and improper storage further depletes parking. At winter holiday shopping time, not only is this a waste of available room but it is unprofitable to the merchants. Improperly stored snow can block driveway views and clog drainage, causing back-ups of snowmelt and the subsequent freeze of sheet ice. Improperly stored snow can also cause physical and salt damage to landscaping.

PARKING AND LOADING

Parking and loading design has received attention as fast-food franchises, in particular, seek to maximize customer turnover. A customer in his car is not one at the cash register. Even that is changing with certain food franchises offering complete in-car service whereby the driver enters, queues up, states his order, receives it and pays for it while driving in a roughly circular motion around a building that essentially has become a large kitchen and not a restaurant. These chains have no parking problem, but then where do the patrons eat? In someone else's parking lot, perhaps, or while driving, which is not safe.

More conventional businesses in the highway strip plan their parking and loading in a likewise more conventional way. Parking is located in front and loading is located in the rear. In older strip areas, insufficient area is devoted to parking and, at peak shopping times, it is difficult to enter the lot from the street. Inefficient lot design contributes to the delay. Large expanses of unbroken parking area encourage random, accident-provoking vehicular movements rather than channelized flows.

PEDESTRIAN ACCESS

Highway commercial strips are not friendly turf for the pedestrian. True, most business generally comes from automobile-borne customers. Frequently, residential areas abut highway strips, and these strips make bad neighbors by fencing themselves in, making it difficult for neighborhood walk-in trade.

Once out of his car, the pedestrian customer has to compete with automobiles maneuvering for parking space or on the way in or out of the parking lot. Only in modern and well-designed shopping centers is there any provision for pedestrian movement separated from automobile traffic.

DRAINAGE

As more areas become paved, higher volumes of rain and meltwater will not be recharged into the water table. Paved parking areas have runoff coefficients of over ninety percent, extremely quick peaking times (ten minutes or less in a downpour), and contain large amounts of surface pollutants such as oil and grease from vehicles, litter, and salt from winter deicing.

POLICY ISSUES

CORPORATE POLICIES

Corporations which license or franchise on a strip generally have location standards and frequently have design standards for their structures and sites. The location standards include frontage roads, retail trade area, and traffic volume by the site. Design standards include signing, landscaping, parking and, in some instances, building size and style.

The standards of companies responding to the questionnaire in connection with this study (See Attachment A) can be summarized as follows:

- Location: On a heavily-travelled way;
- Site: Level site with a minimum of 20,000 square feet in area;
- Design: Paved, well-marked parking with a ratio to floor area varying from 1 to 1 to 5 to 1;

One, or in some cases two, traffic entrances;
Landscaping;
Signs, sometimes free-standing.

All respondents indicated a willingness to abide by local regulations and to cooperate with local objectives.(1)

POLICIES OF THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS

The Commonwealth of Massachusetts Department of Public Works constructs and maintains a vast highway network which includes interstate, primary and secondary roads. For these roads, funds are provided to communities in varying degrees for construction and reconstruction on a participatory basis with the Federal Highway Administration. "Chapter 90" funds are available for tripartite participation in other sections of the highway network. In these instances, the State is a participant along with the county, with the State contributing fifty percent of the cost while the county and municipality share equally in the remainder. In the Secondary Highway Assistance Program, it is necessary that the municipality acquires the necessary land for the improvements prior to any participation.

In its policy, the Department is responsive to community needs and desires. This policy allows for flexibility in design, funding and other factors necessary in a society where aesthetic, environmental and social values are primary concerns.

The Department has jurisdiction over driveway access to State highways. Policies are developed by the Public Works Commission acting for the Secretary of Transportation. In the Williamstown area the regional jurisdiction is invested in the District Highway Engineer whose offices are in Lenox. Permits for access to the highway are obtained through this office which mandates compliance with established design criteria.(2) Safety, public convenience and other factors are considered by the granting authority.

LOCAL LAND USE CONTROLS

Well-meaning local land use controls have contributed to the problem of strip commercial development. Frequently zoning has designated strip areas in advance of the need for business areas. The development of the strip itself is frequently by evolution rather than by benefit of planning. As discussed previously, the long and narrow commercial corridor adversely impacts more abutting land than would a more compact shape. Long unbroken commercial frontages with many entrances and exits adversely affect traffic flow, as previously discussed. Clearly there is a planning alternative to strip commercial development. Un-

(1) Special cooperation was received from A&P, First National Stores, Friendly Stores, Holiday Inn and Pizza Hut.

(2) Massachusetts Department of Public Works, Highway Design Manual, 1970.

fortunately, under existing regulations, development in the strip is done on a lot-by-lot basis. Because of the way in which many zoning controls are written, single free-standing structures, each with its own front, side and rear "yard" are practically required. No attempt is made to coordinate or encourage the clustering of commercial uses to minimize the curb cuts necessary, the pooling of parking area needs, or solutions to drainage or wastewater problems. While the free-standing business is certainly a valid use, a look into innovative solutions to group such businesses will be explored in Part Three of this Study.

Existing planning standards relate to the following types of business areas:

Neighborhood shopping center
Community shopping center
Central business district
Regional shopping center

Accepted standards have not been developed for the highway business area because, although sanctioned by zoning, such areas are rarely planned.

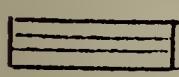
Typical zoning designations for such area and permitted uses are:

- Tourist Business District: Motels, inns, restaurants, gift shops, antique shops and sometimes filling stations.
- Highway Business District: Automobile sales and service, drive-in restaurants, equipment sales.
- Commercial Business District: Automobile sales and service, supply houses, warehouses, storage.

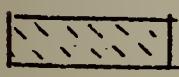
ZONING DISTRICTS:



GENERAL
RESIDENCE 1



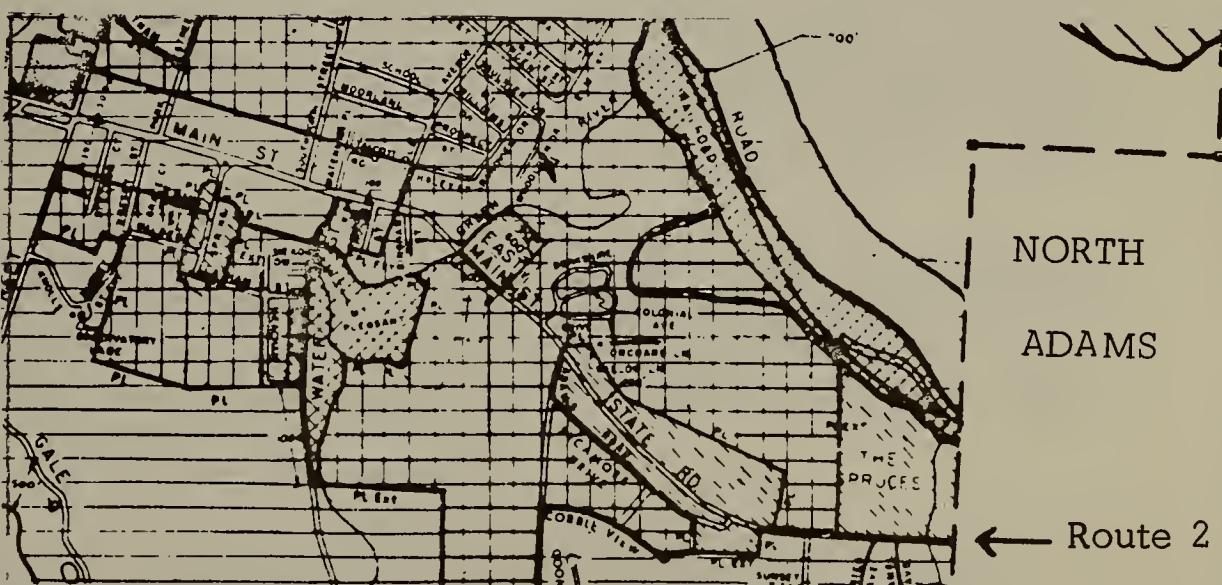
GENERAL
RESIDENCE 2



BUSINESS



LIMITED
INDUSTRIAL



In Williamstown a full range of land use controls is exercised. For example -

Zoning

The area along Route 2 is in three different zoning categories: General Residence 1, General Residence 2 and Business. It is interesting that, although the Town has a Tourist Business category, it has never seen fit to place any of the strip area in this district.

The major permitted use categories along the strip are:

1. General Residence 1

Single family and related residential uses and on a special permit, schools, veterinary hospitals, medical buildings, utility buildings, research laboratories, offices, and multi-family dwellings.

2. General Residence 2

All of the uses of General Residence 1 except multi-family dwellings.

3. Business

Subject to site plan approval, retail business and services, offices, banks, restaurants with inside service and dwellings on the second floor and on a special permit, motels; gasoline service stations; automobile, farm and similar equipment sales; depots; theaters, bowling alleys, and other places of amusement or assembly; drive-in restaurants; and funeral homes.

The Town has a comprehensive procedure for site plan review and special permits, including review of landscaping, lighting, signs, orientation, drainage, and massing in relation to surrounding area. The zoning contains detailed parking requirements and includes general design provisions pertaining to lot size, building placement and size.

Sign By-Law

The sign by-law, updated in 1976, is comprehensive in respect to new signs and includes a provision for the elimination of non-conforming signs. Under this by-law permits are issued (without a time limit) for conforming non-illuminated signs which have no moving parts and do not exceed sixteen (16) square feet per forty (40) feet of frontage in a business district.

Environmental Impact Statement

In 1976 the Town adopted a "By-Law Requiring Environmental Impact Statements", which pertains to certain uses permitted on Route 2: multi-family dwellings, research and development facility, and motel or similar use of fifty or more rooms.

CASE STUDY AREA

GENERAL

The pleasing aspect of the "Village Beautiful" comes to an abrupt halt as one descends the hill on Route 2 in the direction of North Adams. The boulevard and shade trees are gone, largely replaced with roadside businesses, signs and utility poles. The decline of this once fine road is not complete - a few fragments of the older Williamstown character still survive amid the commercial chaos, but can probably be expected to be replaced by auto-oriented businesses in not too many years. Measures are needed to manage and control the future character of the strip and to extend the character of Williamstown Center into the strip.

LANDSCAPING AND SIGNING

Boulevard layout, including tree planting, lighting and fencing, seen in the center of Williamstown is not extended onto the strip. Views to the hills beyond the strip are not being maintained and enhanced.

A few sites contribute to the positive character of the strip including several homes, the cemetery, an outdoor vegetable market, the Green River, views of the mountains, and some open areas.

Some signs are garish and competitive. Signs of national chains seem to be the biggest problem. Ways are needed to unify signing to reduce its dominance and to make it more in keeping with the Williamstown character.

LIGHTING AND UTILITIES

A uniform system of roadway lighting and handling of cables should be developed. The presence of cables and poles is dominant. No attempt has been made to improve the quality and design of fixtures.

PARKING LOTS AND DRIVEWAYS

Parking lots are a definite visual problem and also separate businesses from the road. Site planning alternatives are needed to suggest more attractive and functional arrangements of parking areas.

Access to businesses along the strip is hazardous in many places because of the difficulty of making left turns against opposing traffic. When entering the strip from parking lots, visibility of the road is often poor. Signs, poles and congestion all contribute to the hazard.

ACCOMMODATION OF PEDESTRIANS AND BICYCLISTS

Pedestrians and bicyclists use the road also, but are poorly accommodated. Sidewalks, which serve nearby residential areas as well as the business strip,

or gravel paths are present in some places but are not consistently available or maintained. There is no space for bicyclists; children on bikes are seen trying to negotiate the traffic on the highway.⁽¹⁾ Bike racks have not been installed. There are no controlled crosswalks.

BUILDINGS

There are about forty establishments on the strip. Unfortunately the design of new construction is not coordinated because design controls on such items as materials, siting, placement of air conditioning and other unsightly equipment, and use of color are lacking.

The confused character of the area and mixed quality of the buildings is often detrimental to business.

SITE

The site, as is usually the case with strip development, is elongated along the frontage. There is little depth, although there are about thirty acres undeveloped on the north side of Route 2, which are not in the flood plain. The general lack of depth and many ownerships result in some constraints to business expansion. However, the area can be designed for development with the scheme incorporated in the proposed design plan.

(1) Massachusetts General Laws state that bicycling is not permitted on sidewalks in business districts (Chapter 85, Section 11B).

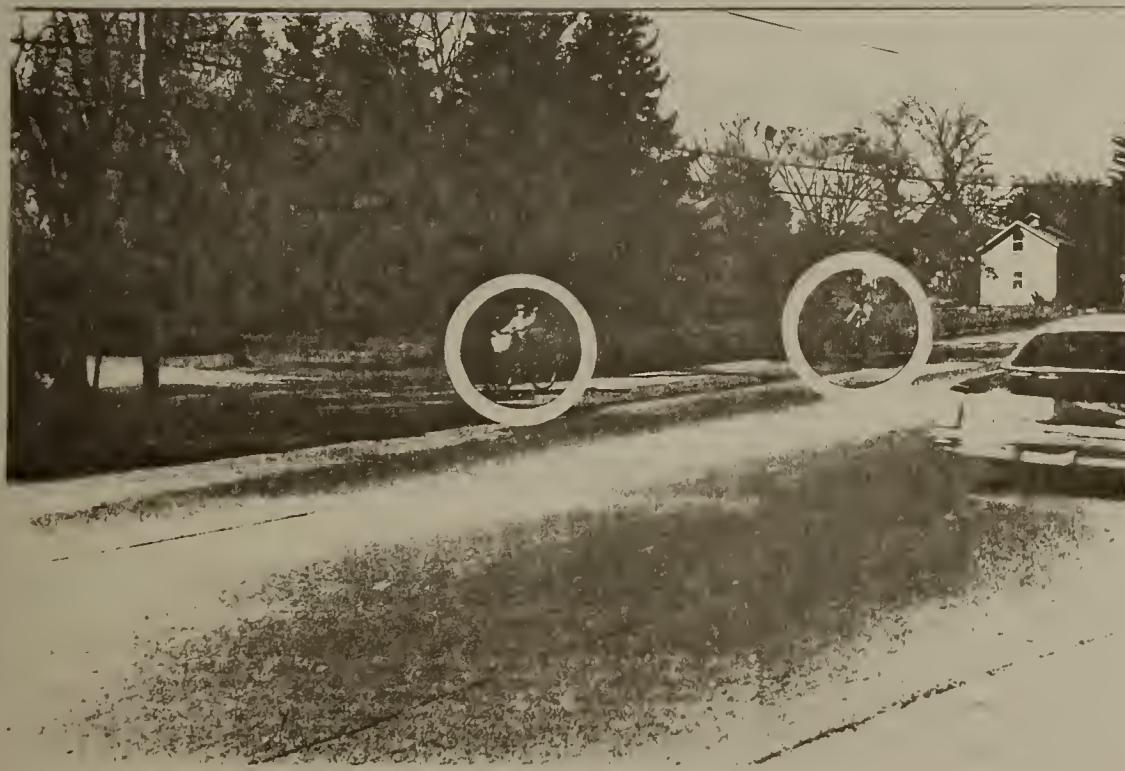


Route 2: Existing View

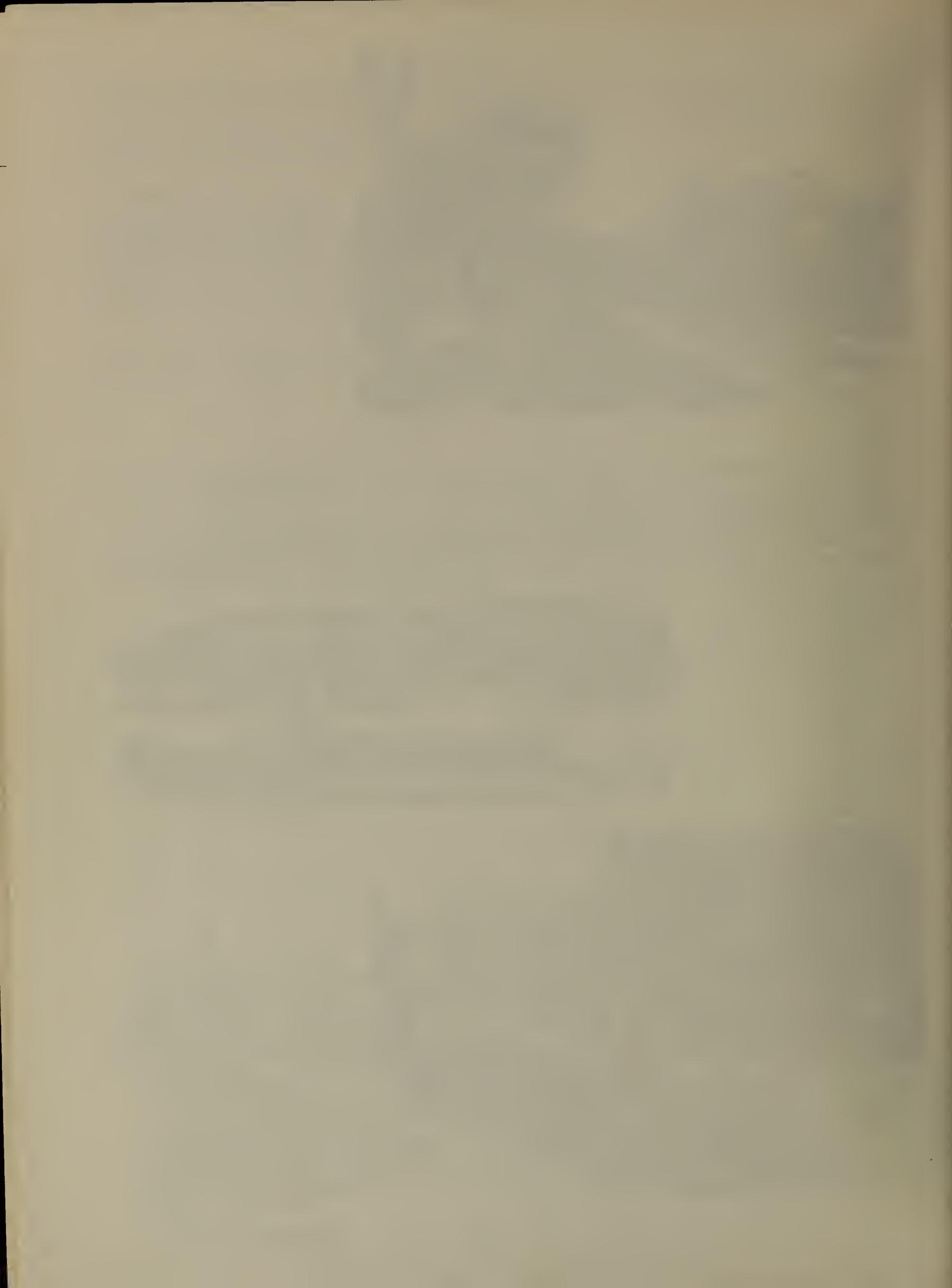


View of the older undisturbed portion of the Route 2 commercial area.

Unscreened electric power transformer contributes to unpleasing visual effects and sets a poor example for commercial enterprises in the area.



Bicyclists posing safety hazard along highway area.



PART TWO - SOLUTIONS

GENERAL SOLUTIONS

Solutions have been developed in this study to improve existing highway strips. They are designed to improve circulation, appearance and the efficiency of the land use pattern. The solutions are presented in the following major categories:

Traffic and Circulation
Bikeways
Parking
Appearance
Business Growth and Development

In each of these categories the solutions are illustrated by application to Williamstown in conceptual form. The traffic and circulation category is developed into schemes or alternatives, one of which in turn is selected for development and modification to plan stage and for engineering design.

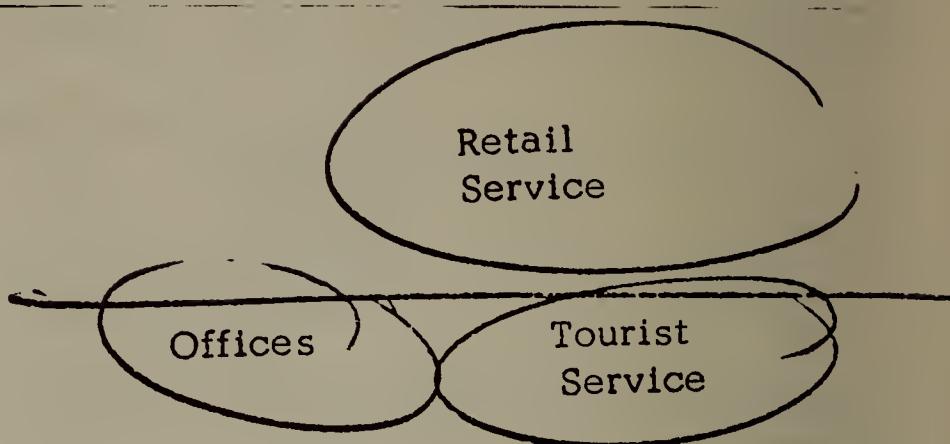
TRAFFIC AND CIRCULATION

To improve traffic and circulation and to increase safety and convenience, the following are required:

1. Definition and separation of pedestrian, bicycle and vehicular traffic within the site and on the roadway.
2. Reduction or elimination of curb cuts.
3. Removal of traffic hazards.
4. Separation of traffic with a median, as a minimum, and with service roads, wherever possible.
5. Separation of turning traffic from through lanes.
6. Installation of appropriate signing.
7. Removal of distractions.
8. Refinement of intersection design.
9. Elimination or control of cross traffic.
10. Installing fences to protect the pedestrian.

11. Separating business by classifications appropriate to the area - tourist services, local sales and services, distribution.

For example, in Williamstown:

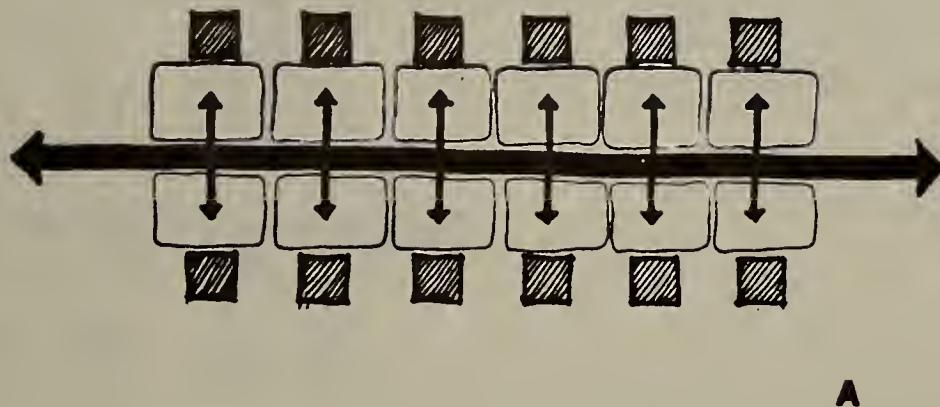


Development Concepts For Traffic and Circulation

Development concepts, representing different levels of improvement each of which is more advanced than the previous, have been prepared. In each case standards shown in Table 5 (page 28) are recommended.

A. Driveway Alignment:

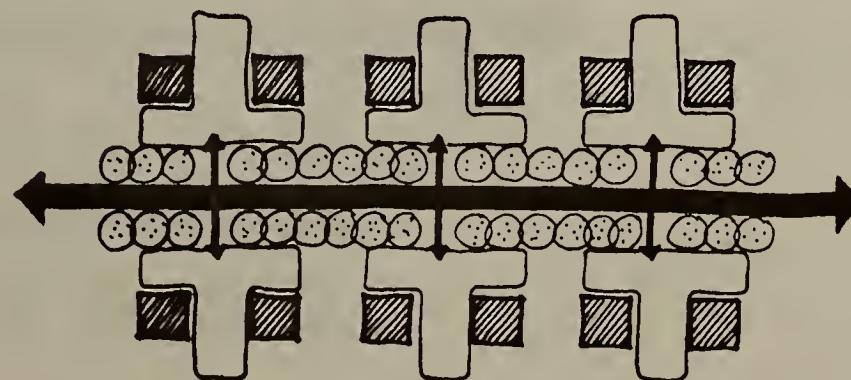
A first step in improving the strip may be to align the driveway cuts. This makes a modest reduction in driveways by limiting to each business one defined cut and reduces some confusion. Most of the accidents on Route 2 are rear-end collisions involving two cars, one car which is entering or exiting from abutting properties in a random pattern. The introduction of order will reduce the danger.



A

B. Shared Driveways and Parking:

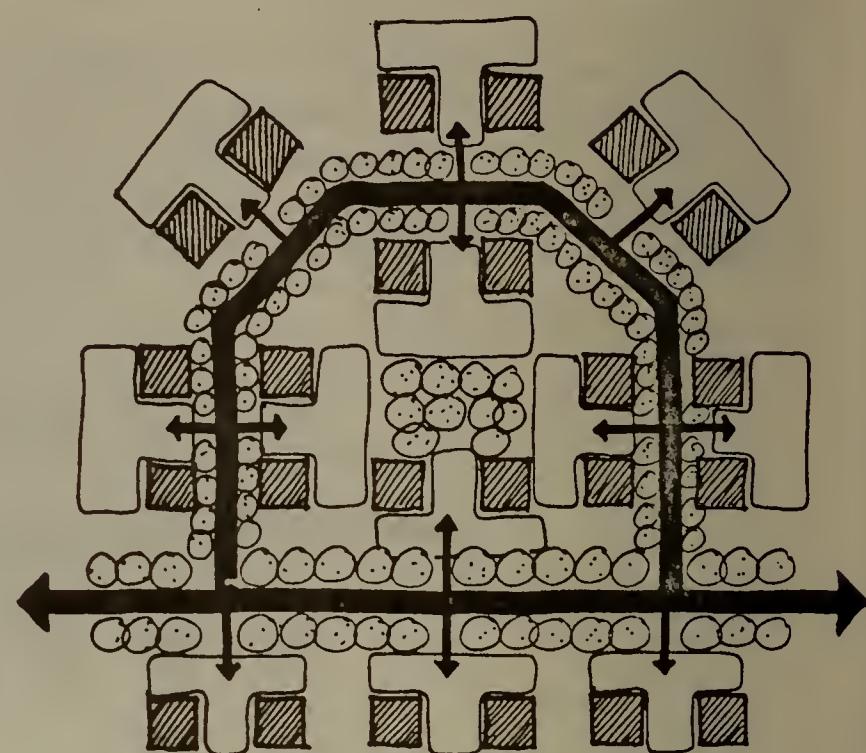
Shared driveways and parking areas increase safety beyond the improvements of Concept A and also improve appearance. Sharing access points may result in a fifty percent or greater reduction in driveway cuts. Shared parking areas may permit a reduction up to thirty percent because complementary uses require less total area than each use individually. For example, the peak hours of a restaurant and a grocery store offset each other. The result of these reductions is greater uninterrupted areas which may be landscaped and fewer hard-topped or paved areas with their runoffs. The scheme below permits landscaping along the frontage where previously there were curb cuts.



B

C. Cluster:

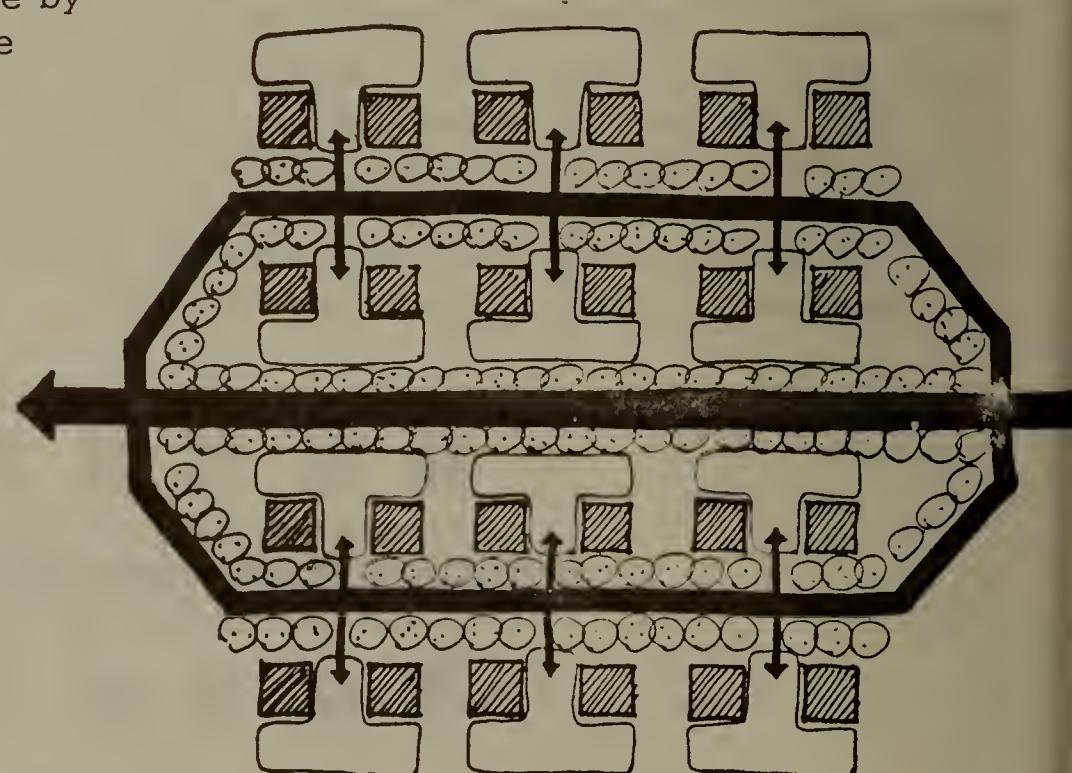
The shared drives shown in Concept B may be extended to make a cul-de-sac or loop road permitting an extension of the business area without extending the strip. The number of cuts may also be reduced with all the beneficial results of Concept B. In the scheme shown one drive serves four businesses instead of two, as shown on Concept B, or one each, as shown on Concept A. This consolidation of businesses enables development with unified architecture and landscaping. In addition, it encourages the shopper to move comfortably from business to business on foot, eliminating the need to move the car between each errand.



C

D. Loop Road:

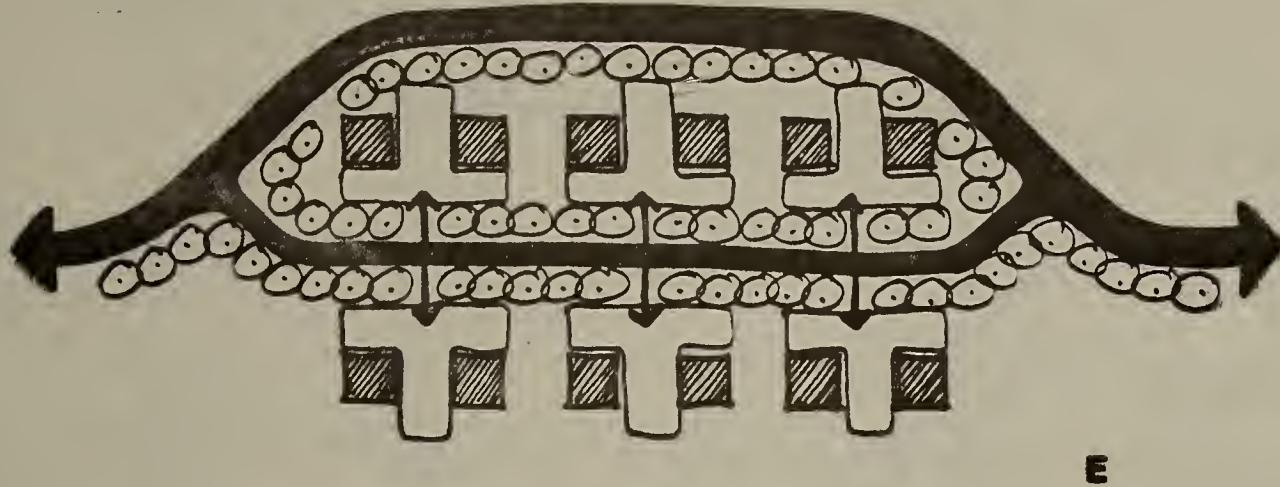
A loop road eliminates cuts on the main road entirely and opens new areas for business. The scheme shown has all the advantages of Concept C; however, the community must be careful that the new road does not assume all the problems and adverse characteristics of the original strip. This can be done by superimposing Concept C on the loop road. In some cases the highway on which the strip is located has been relocated or straightened leaving abandoned right-of-way which can be utilized for a loop road.



D

E. Relocated Road:

In some instances a service road can be provided, behind or in front of the businesses. If this is done, the area can be improved by incorporating Concepts B or C on the service road. In the case shown here a bypass road is constructed and the original road becomes the service road.



Traffic Considerations

The selection of the appropriate concept is dependent upon the present development, the right-of-way width, the amount and type of traffic presently carried by the existing roadways and the anticipated traffic growth. It is recognized that successful improvement of the business area will increase business, and therefore traffic.

The potential traffic generation from specific land use plays an important role in the planning process. If generation rates are known, traffic volumes can be calculated for use in designing access roadways to service industrial, office and commercial developments. To effectively plan and design for development and traffic facilities to complement one another, estimates of future traffic volumes and turning movements are needed. The most community-used method of predicting generated traffic volumes for business areas is by using a measuring unit of time per unit of development use. This relationship is shown in an informational report by the Institute of Transportation Engineers titled Trip Generation (1976). (1) This study can be used to estimate typical traffic volumes for proposed developments.

Typical trip-generation rates, as determined from this report, are listed for use as a guide in planning. For a specific location, a detailed analysis of trip generation and existing traffic flows is necessary.

(1) Technical Committee 6A6.

TABLE 2
SUMMARY OF SELECTED TRIP GENERATION RATES

Land Use	Trips Per:	Average Weekday Vehicle Trip Ends ⁽¹⁾		
		Average	Maximum	Minimum
Hotel	Employee	11.30	17.20	7.20
	Room	10.50	13.40	9.10
Motel	Employee	10.58	28.00	7.20
	Room	9.58	11.00	8.19
Resort Hotel	Employee	10.30	-	-
Library	Employee	51.00	81.90	36.80
	1000 gr. s.f. ⁽²⁾	41.80	75.40	28.80
Nursing Home	Bed	2.70	4.00	1.90
Clinic	Employee	5.90	-	-
General Offices	Employee	3.46	11.21	2.66
	1000 gr. s.f.	11.69	43.50	3.60
Medical Offices	1000 gr. s.f.	75.00	99.00	38.00
Office Park	Employee	3.33	3.52	2.92
	1000 gr. s.f.	20.65	30.30	9.40
	Acre	276.60	-	-
Shopping Center (in 1000 g.s.f.)				
0 to 50	1000 gr. s.f.	115.80	270.90	21.50
50 to 100	" " "	79.10	161.30	25.50
100 to 200	" " "	60.40	103.70	32.10
200 to 300	" " "	49.90	92.00	18.00
300 to 400	" " "	40.40	58.40	16.00
400 to 500	" " "	47.60	90.00	29.00
500 to 1,000	" " "	34.50	61.20	17.30
Discount Store	1000 gr. s.f.	64.60	121.10	29.80
Quality Restaurant	Seat	1.20	-	-
	1000 gr. s.f.	56.30	-	-
High-Turnover, Sit-down rest.	1000 gr. s.f.	164.40	551.20	47.90
Drive-In Restaurant	1000 gr. s.f.	553.00	828.00	376.00
New Car Sales	Site	33.00	39.00	27.00
Service Station	Station	748.00	1000.00	620.00
	Pump	133.00	170.00	103.00
Supermarket	1000 gr. s.f.	125.50	270.80	51.70
Convenience Market	1000 gr. s.f.	322.60	351.70	293.70

(1) Trip end refers to a two-direction vehicle movement.

(2) Gross square feet.

Zoning Considerations

As can be seen from the preceding tabulation, the density and type of land use in a business area can result in a wide variation in traffic trips generated. Traffic congestion and growth can be controlled by controlling the intensity of development. This can be accomplished by several zoning methods which include: maximum land-area coverage limits, floor-area ratio method, intensity of land use, and impact zoning.

TABLE 3
MAXIMUM LAND AREA COVERAGE⁽¹⁾
RECOMMENDED DEVELOPMENT - INTENSITY

ZONING METHOD	RURAL	SUBURBAN	URBAN	
			URBAN	HIGH RISE
<u>Coverage of Site</u>				
Office				
Buildings	2%	7%	11%	up to 100%
Streets & Parking	4%	17%	30%	
Commercial	Total	6%	24%	41%
Buildings		1%	4%	8%
Streets & Parking		5%	15%	26%
	Total	6%	19%	34%
Landscaped Area	94%	76% - 81%	30% - 26%	may be none
<u>Floor-Area Ratio</u>				
Office	.019	.069	.139	.556
Commercial	.010	.038	.077	.306
<u>Number of stores (average)</u>				
Office	1	1	1.25	22.9
Commercial	1	1	1.00	1.5

Note: Trade-offs can be developed. For example, one inch of rainfall in one thousand square feet of roof equals 600 gallons of water run-off. Two stories reduce the roof surface and might be encouraged by trade-offs, e.g., Town do the planting, and/or require multiple stories by zoning.

Greenburgh, New York⁽³⁾ has recently adopted an impact zoning ordinance, using a special impact zoning formula, with a point system, to reduce the development potential of vacant land to a level commensurate with traffic capabilities. The formula permits a maximum of 100 impact points per acre, determined as shown in Table 4.

(1) Regional Planning Council of Baltimore, Environmental Characteristics Planning, 1972.

(2) May necessitate covered parking.

(3) V.J. Ferrandino, Planning, American Society of Planning Officials, Chicago, June, 1977.

TABLE 4
IMPACT ZONE POINTS

LAND USE	VARIABLE POINTS PER	IMPACT POINTS
Office Space	1000 square feet	9
Mixed Retail	" "	25
Supermarket	" "	55
Fast Food Restaurant	" "	165
Townhouse or Garden Apartment	Bedroom	5
High Rise Apartment	Bedroom	3
Indoor Tennis and Squash	Court	20

TABLE 5
DRIVEWAY AND ROADWAY DESIGN

ITEM		WIDTH	
		MINIMUM	DESIRED
<u>Travel Lane</u>			
Through roadway	- no curb	10 feet	12 feet
	- curb one side	12 "	14 "
	- curb both sides	16 "	20 "
	- turn lanes	10 "	12 "
<u>Median</u>			
No turn lanes		4 "	8 " or greater
With turn lanes		14 "	16 "
<u>Shoulder</u>			
Where no curbing		4 "	10 "
<u>Sidewalk</u>		as required by Local Community	
Varies			
<u>Green Belt</u>			
Varies to provide buffer zone between traffic and roadside development			
<u>Major Drive Spacing</u>			
Non-signalized		600 feet between drives	
Signalized		based on good signal progression	
<u>Building Setback</u>		provide for green belts, sidewalks, bikeways and future roadway widening	

Design Concepts and Guidelines(1)

Because of the various characteristics of different locations, each site must be considered as a unique problem with regard to driveway design and driveway spacing. The following criteria cannot be construed as strict rules or as the only possible solutions, but rather as planning guidelines to be thoroughly evaluated by local agencies before arriving at decisions concerning actual location and design of access drives. Wherever possible, these drives should be coordinated with abutting properties.

Basic widths, curb spacing, radii, and angles of driveways suggested for various land uses in urban and rural areas are given in Table 6. Methods of measurement are illustrated in Figure 1. It should be stressed that these design values are guidelines for local agencies. On State Routes the District Highway Engineer shall approve driveway permits as required to handle expected traffic conditions.

At the intersection of driveways and roadways, signals or left-hand turn lanes may be required. An unsignalized major drive at grade may be considered to be similar to an unsignalized intersection as studied by Harmelink.⁽²⁾ He found left-turn storage lanes to be justified for extremely low volumes (See Figure 2). Harmelink's findings should be considered for inclusion in the operating practices or design guidelines for local agencies.

Before issuing a permit for egress from a parcel of land, the responsible agency should ensure that vehicles can exit from the proposed development with minimum hazard and disruption of traffic.

Because of the complexities and costs (both public and private) of providing access to major traffic generators, competent traffic studies should precede issuance of access permits. The intimate relationship between driveway locations and interior traffic circulation make it highly desirable that site plans also be prepared for local agency approval on the basis of traffic analyses.

(1) To be used in conjunction with the services of the highway engineer.

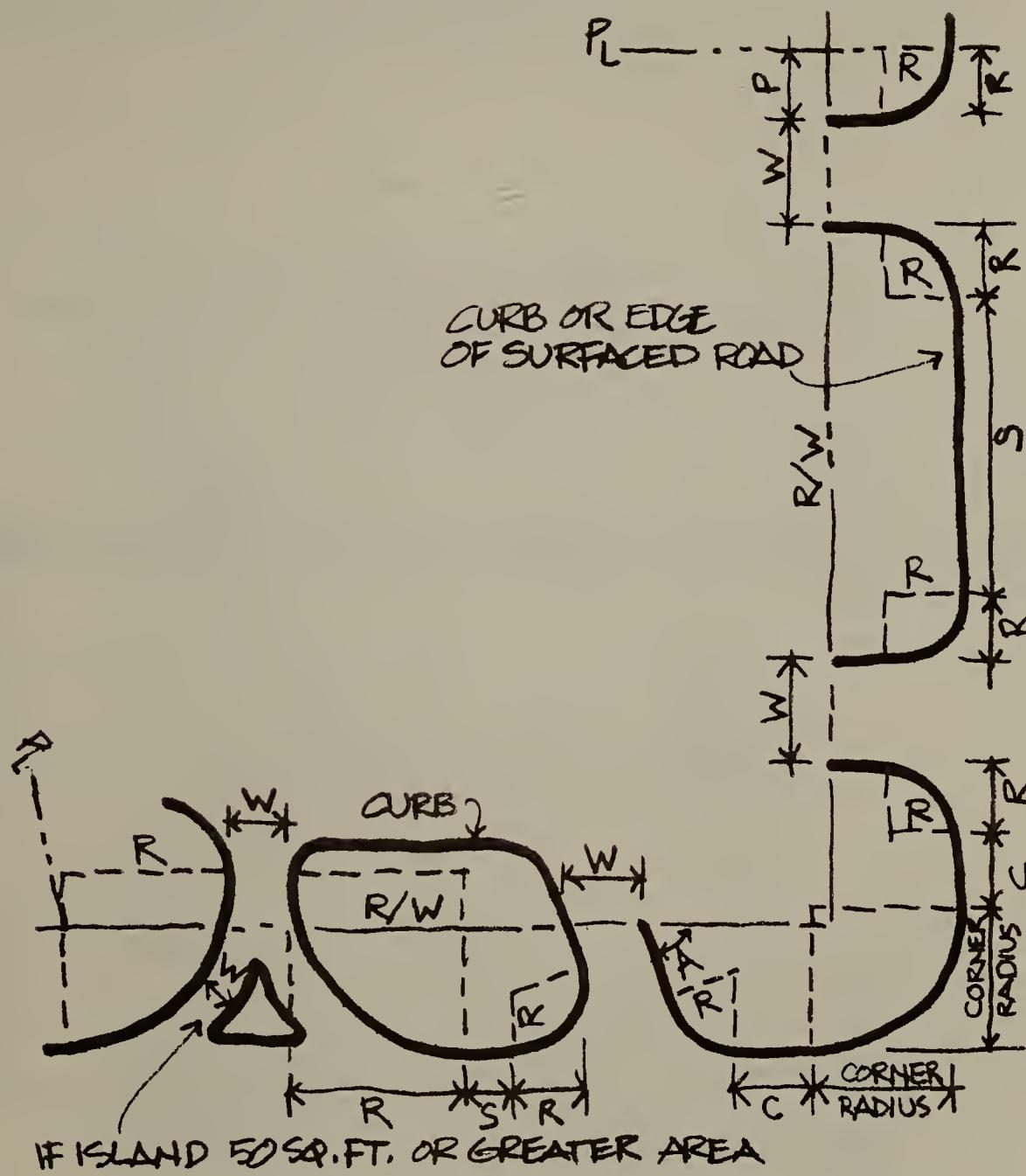
(2) M.D. Harmelink, "Volume Warrants for Left Turn Storage Lanes at Unsignalized Grade Intersections", Highway Research Record #211, 1967.

TABLE 6
RECOMMENDED BASIC DRIVEWAY DIMENSION GUIDELINES*⁽¹⁾

Dimension Reference (See Fig. 1)	W	URBAN			RURAL		
		Residential	Commercial	Industrial	Residential	Commercial	Industrial
Width ⁽²⁾							
Minimum		10'	15'	20'	10'	15'	20'
Maximum		30'	35'	40'	30'	40'	40'
Right turn radius ⁽³⁾	R						
Minimum		5	10	15	10	15	25
Maximum		15	20	25	25	50	50
Minimum spacing ⁽⁴⁾							
From property line	P	0	0	-R	0	0	-R
From street corner	C	5'	10'	10'	10'	15'	20'
Between driveways	S	0	0	0	0	0	0
Angle ⁽⁵⁾	A	45°	45°	45°	45°	45°	45°

*All drives are two-way, except as noted

- (1) Institute of Traffic Engineers Project Committee 5N-S, "Guidelines for Driveway Design and Location", 1974.
- (2) The minimum width of commercial driveways is intended to apply to one-way operation. In high pedestrian activity areas, such as in a central business district or in the same block with auditorium, school or library, the maximum basic width for a one-way commercial driveway should be 30 feet. The width shown applies to rural routes and most city streets including neighborhood business, residential and industrial streets. The width is intended to be measured along the right-of-way line (R/W) in most instances, at the inner limit of a curbed radius or between the line of the radius and the near edge of a curbed island at least 50 feet square in area.
- (3) On the side of a driveway exposed to entry or exit by right turning vehicles. In high pedestrian activity areas, the radii should be half the values shown.
- (4) Measured along the curb or edge of pavement from the roadway end of the curb radius. In high pedestrian activity areas, the minimum spacing between driveways should be five feet.
- (5) Minimum acute angle measured from edge of pavement, and generally based on one-way operation. For two-way driveways, and in high pedestrian activity areas, the minimum angle should be 70 degrees.



S varies with the design

R/W = Right-of-Way

FIGURE 1.

METHODS OF MEASUREMENT

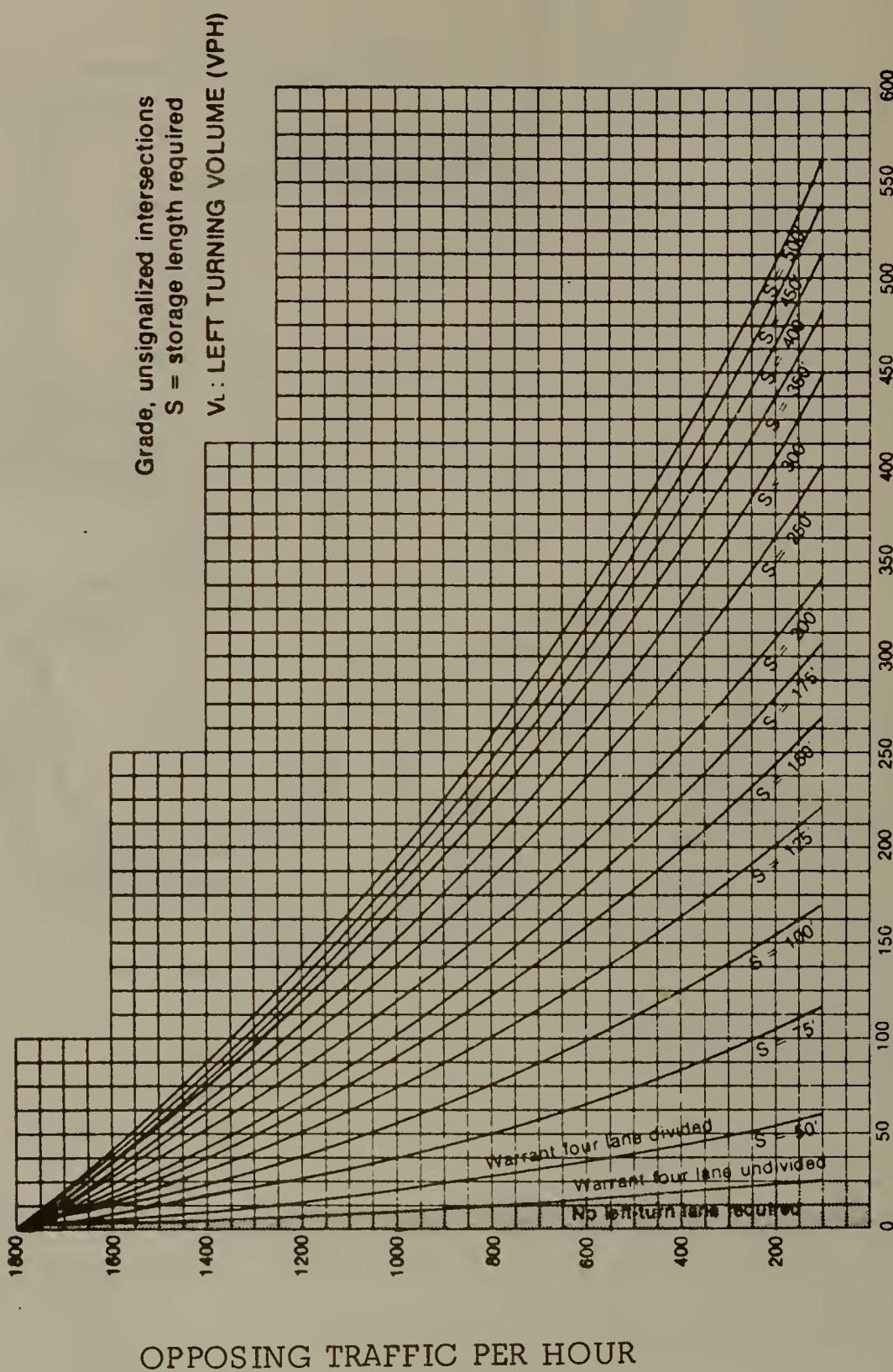


FIGURE 2.
WARRANTS FOR LEFT-TURN STORAGE LANES ON FOUR-LANE, AT-GRADE,
 UNSIGNALIZED HIGHWAYS

The section on graph lying between "undivided" and "divided" ($VL=25$ to 55 vph for a v0 level of 200 vph) relates to a warrant for a one-space length as provided by an ordinary opening in a median about 20 feet wide.

A. Cross-sections:

The following cross-sections (Figure 3 and 4) show guideline dimensions for roadways providing for major drive entrances:

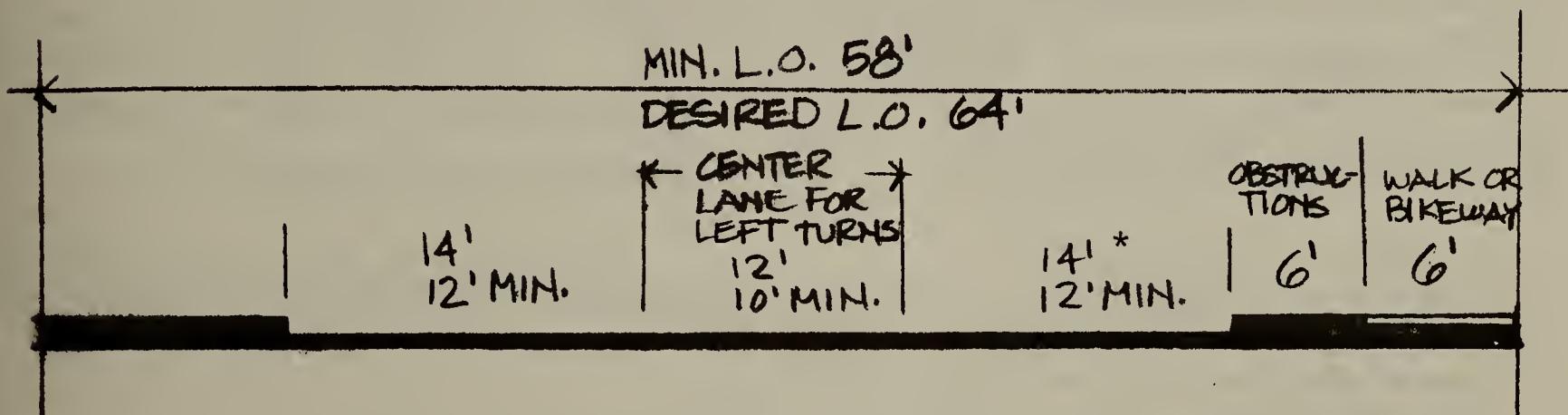


FIGURE 3.

TWO-WAY LEFT-TURN TREATMENT

*Additional thru lane - 12 feet

median about 20 feet wide.

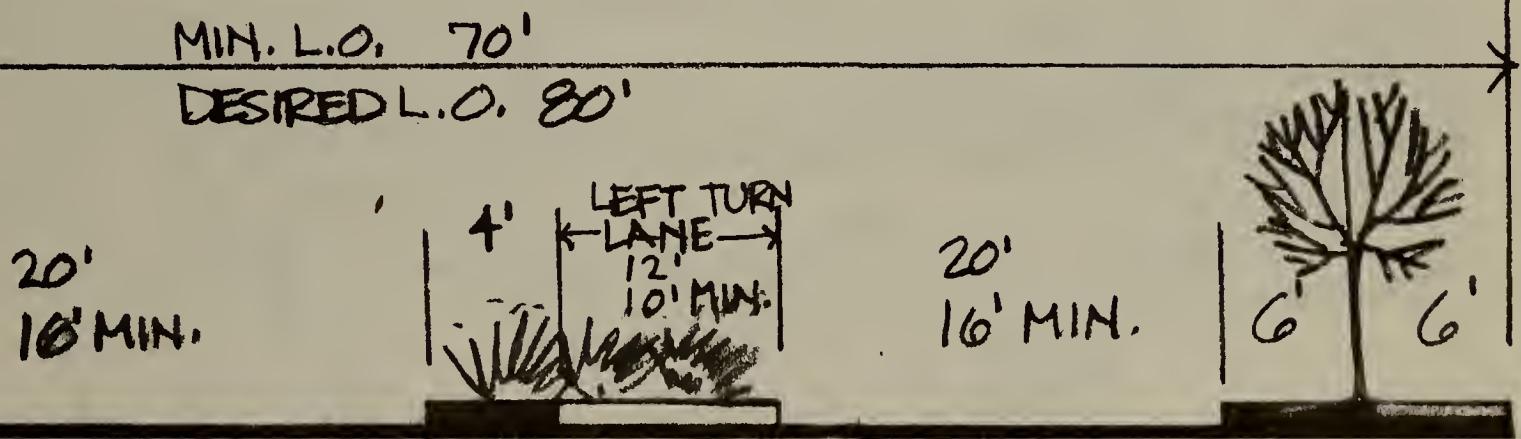


FIGURE 4.

MEDIAN WITH LEFT-TURN LANE

(1) MIN. L.O. = Minimum Lay Out

B. Driveways:

The following designs (Figures 5 - 14) show various concepts for providing access to drives:

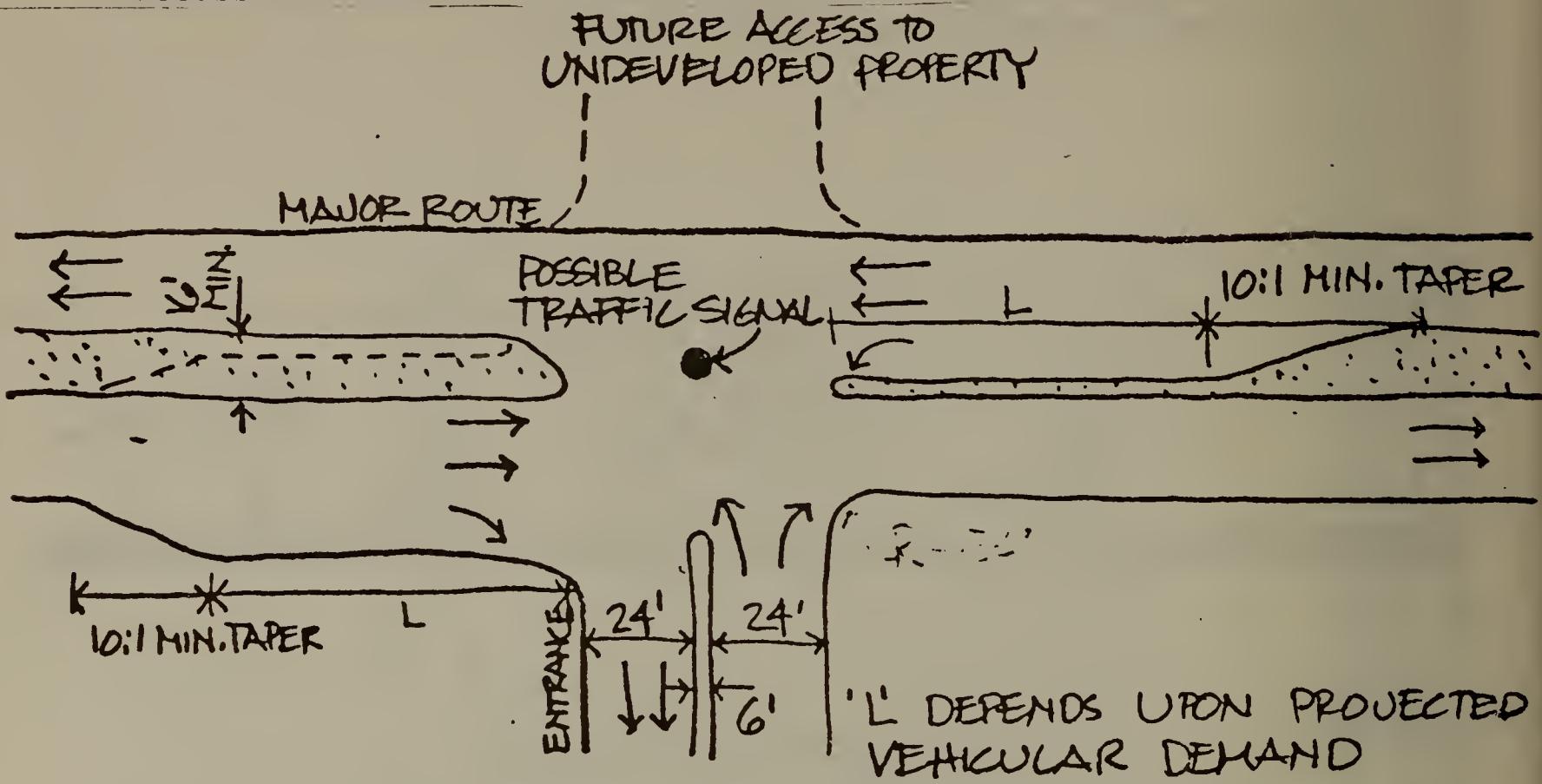


FIGURE 5. FULL ACCESS FROM DIVIDED ROADWAY MOST COMMONLY USED TO SERVE MAJOR DEVELOPMENTS

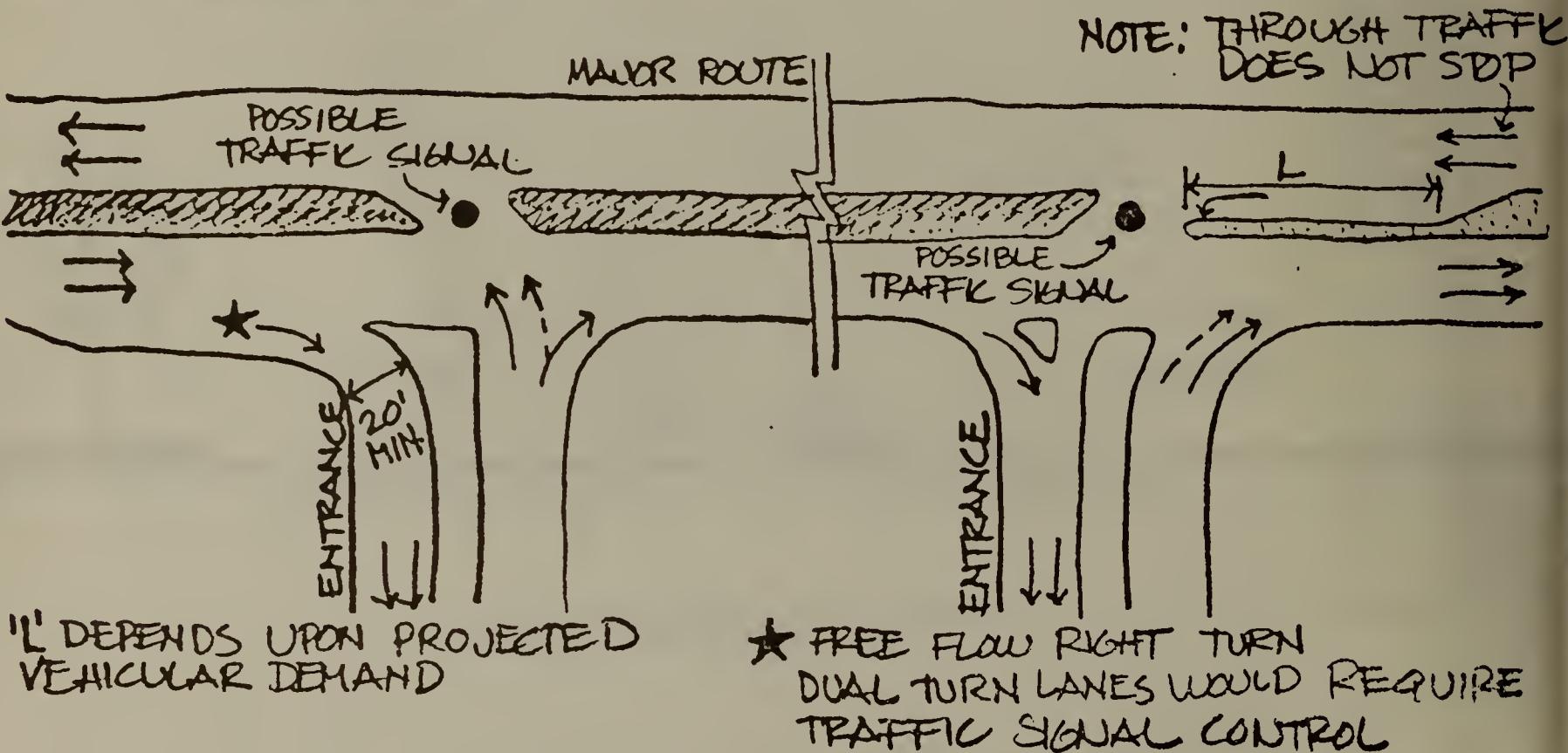


FIGURE 6. DIRECTIONAL ENTRANCE/EXIT ON DIVIDED ROUTE

Design illustrating the operation of two directional entrances.

This would best serve where drivers have limited exposure to other entrances, and thus, the use of the entrance serving each direction is maximized.

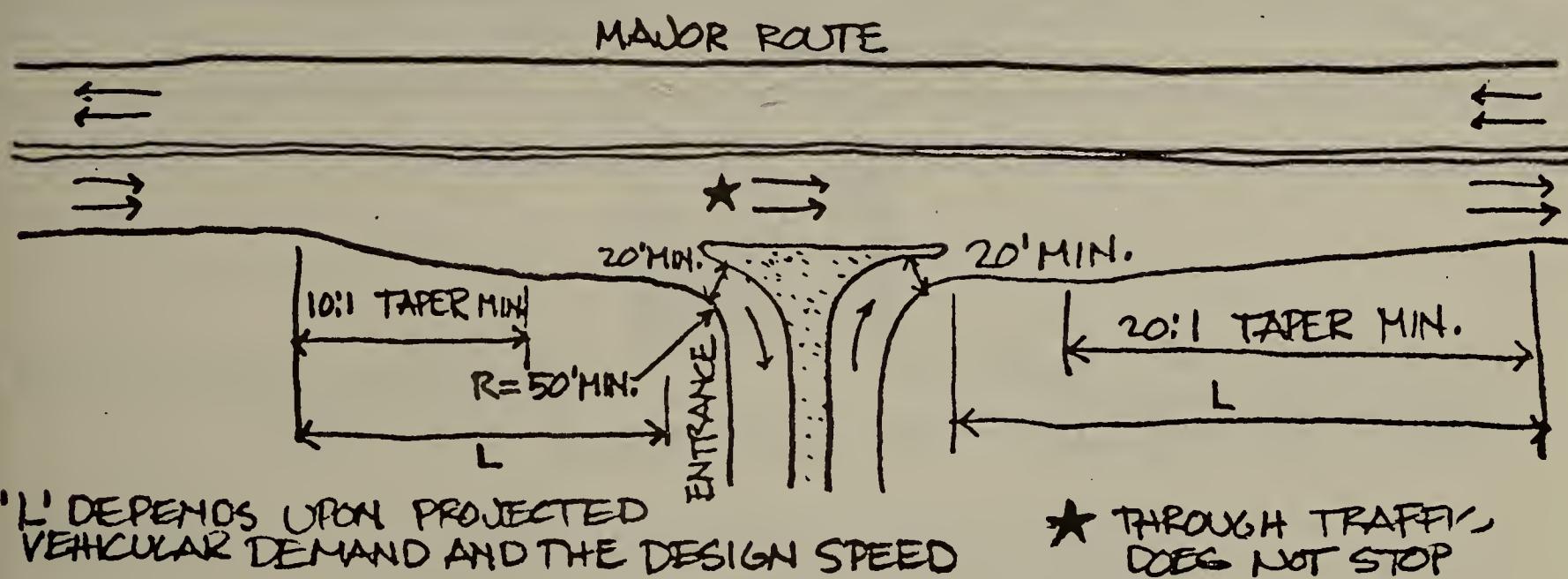


FIGURE 7. RIGHT TURN TREATMENT ON DIVIDED OR UNDIVIDED ROUTE

Design restricted to right turn entry or exit to minimize conflicts.

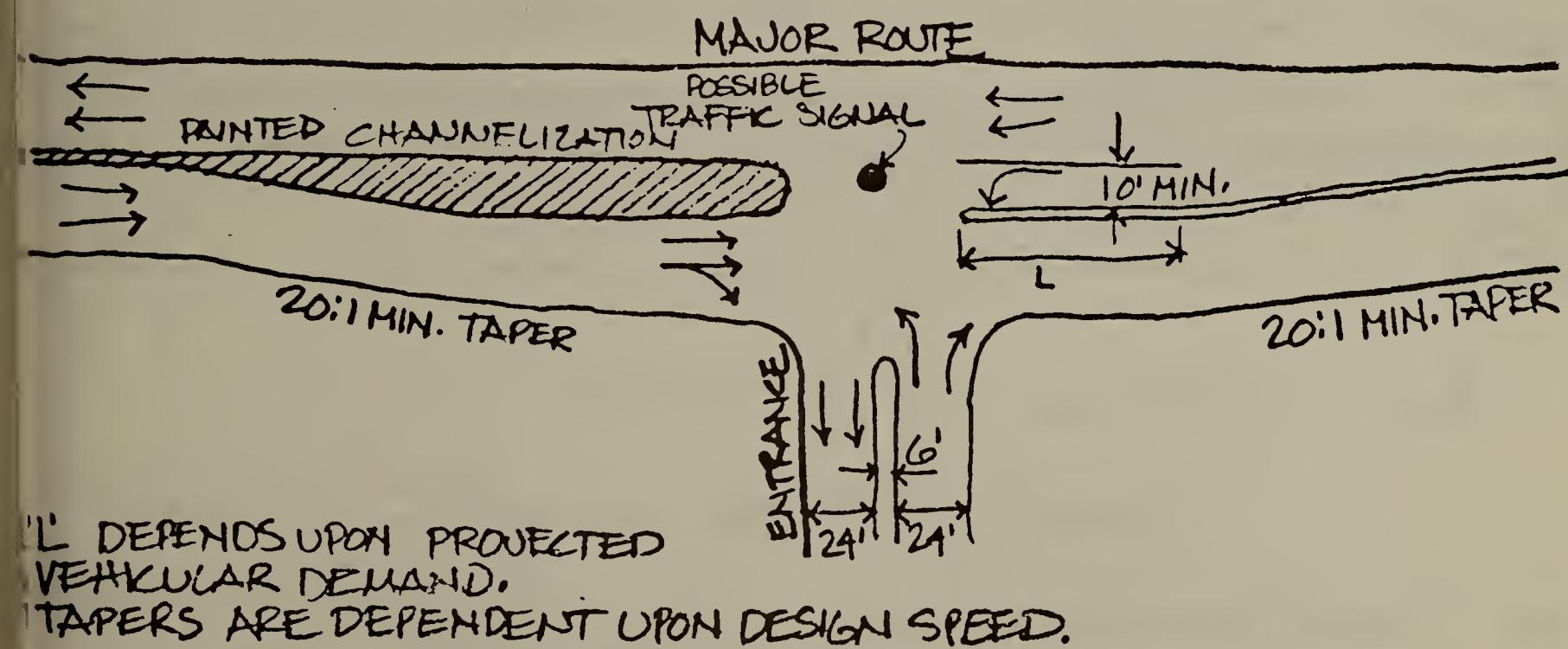


FIGURE 8. LEFT TURN TREATMENT ON UNDIVIDED ROUTE CREATED BY WIDENING HIGHWAY

Design used on major undivided roadways where left turn storage lanes are required. Widening may be done on one or both sides of roadway.

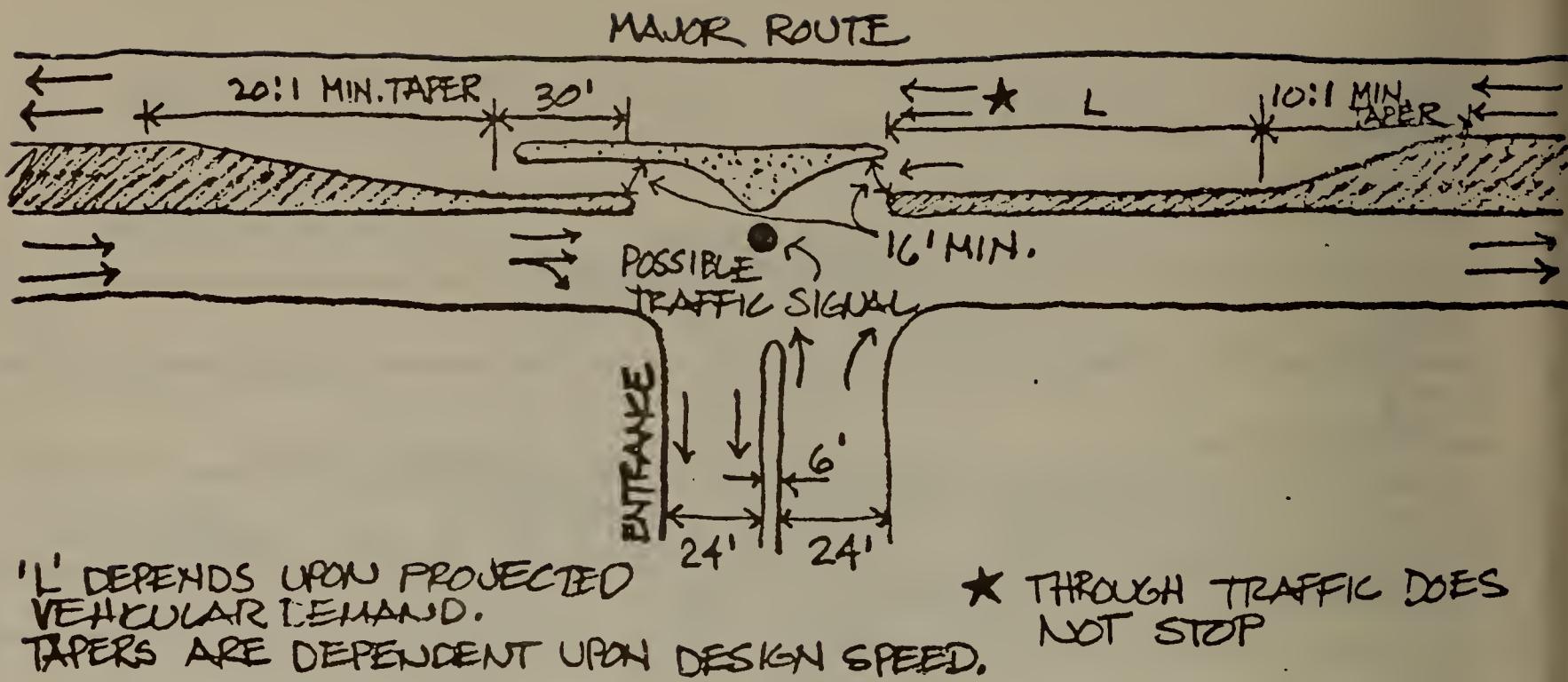


FIGURE 9. LEFT TURN TREATMENT ON DIVIDED ROUTE

On major divided highways featuring a median width of fourteen feet or greater, barrier channelization can be used to provide protected left turn storage lanes.

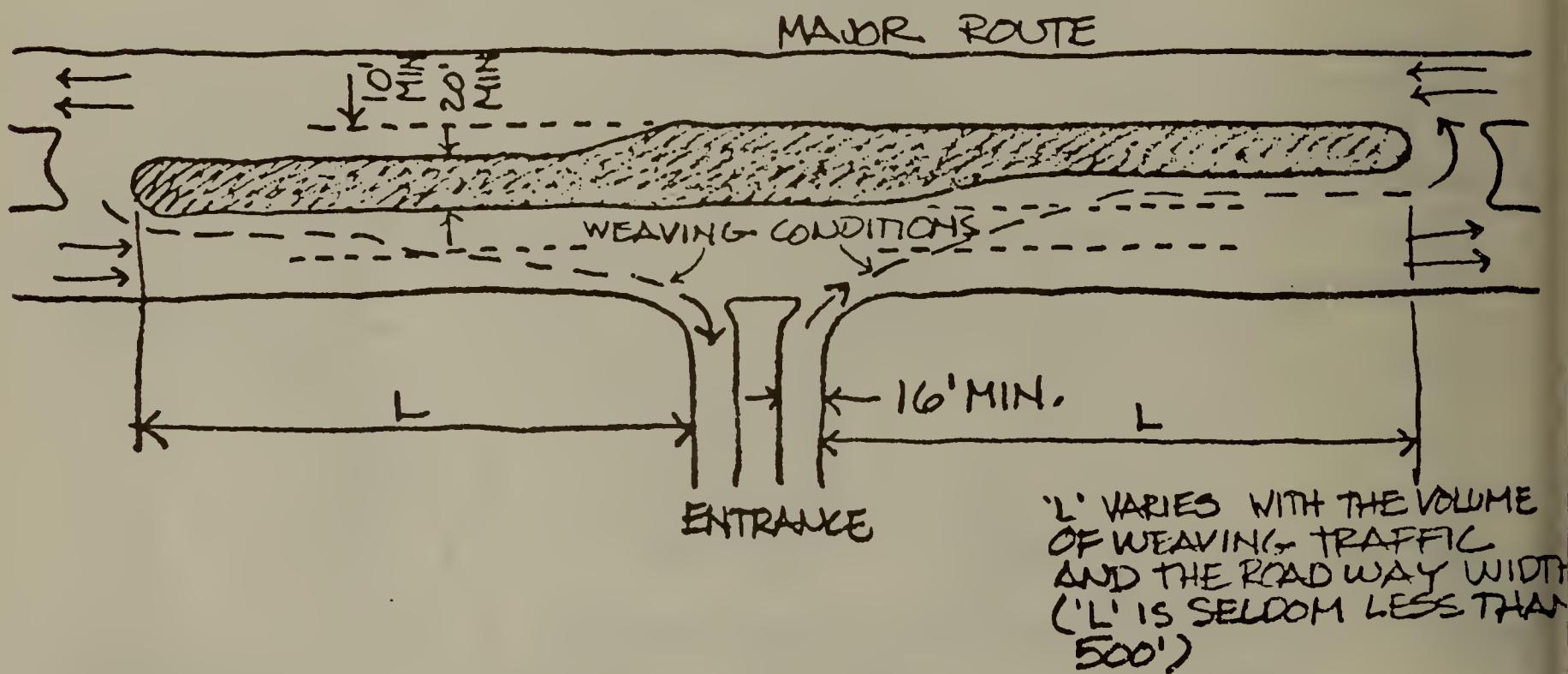


FIGURE 10. LEFT TURN TREATMENT ON ROUTE WITH MEDIAN OVER 30 FT.
(9m) USING U-TURN LOOPS

This design is used in a number of areas to achieve higher capacity with minimum interruption of through traffic on the major route.

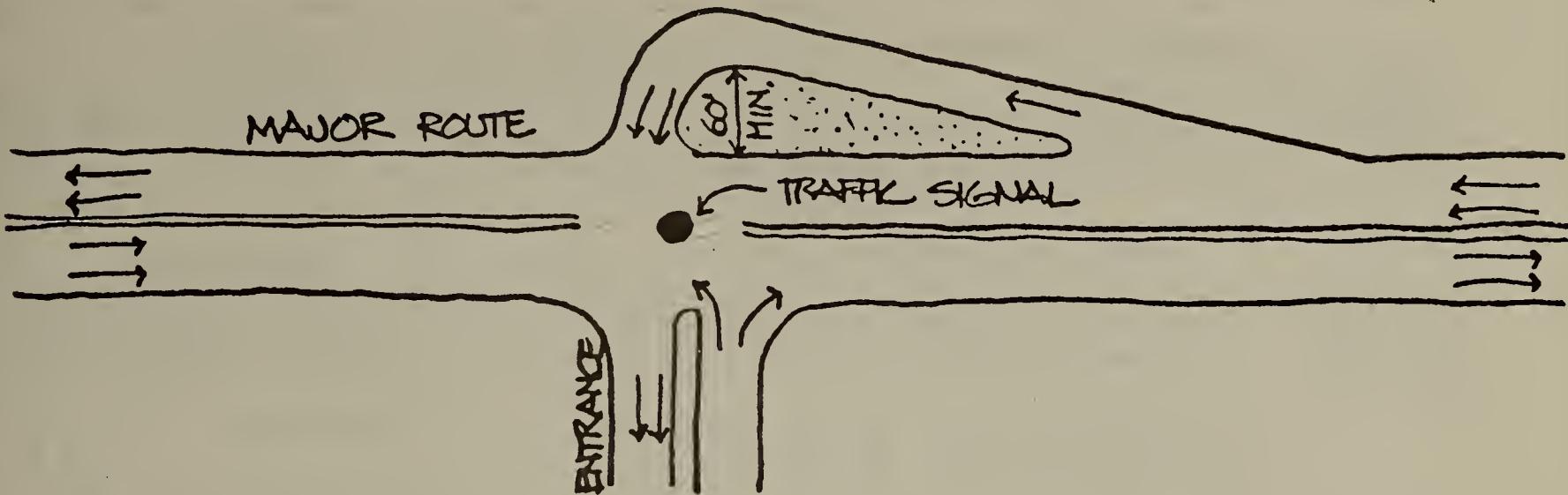


FIGURE 11. "JUG-HANDLE" LEFT TURN TREATMENT

On major routes where high capacity is desired, the jug-handle design treatment is one way of achieving such a capacity. This design allows more turning lanes as well as U-turn to be made opposite shopping center entrance.

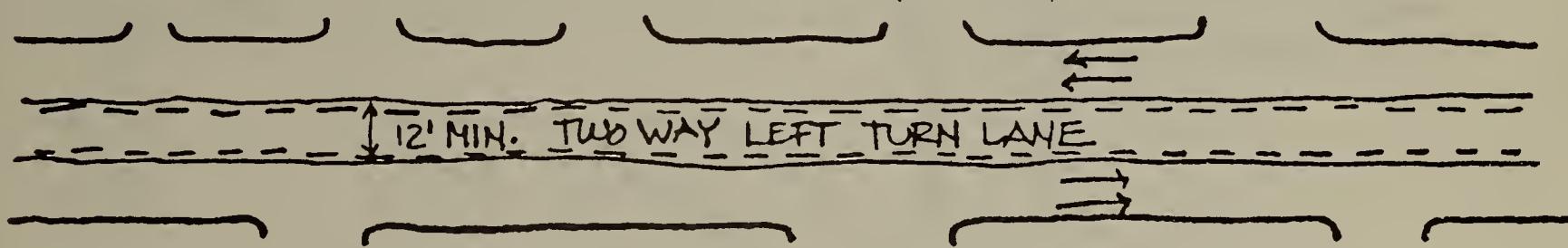


FIGURE 12. TWO-WAY, LEFT-TURN LANE TREATMENT

This design provides a common left-turn storage area for both directions and is used where access to numerous drives is required.

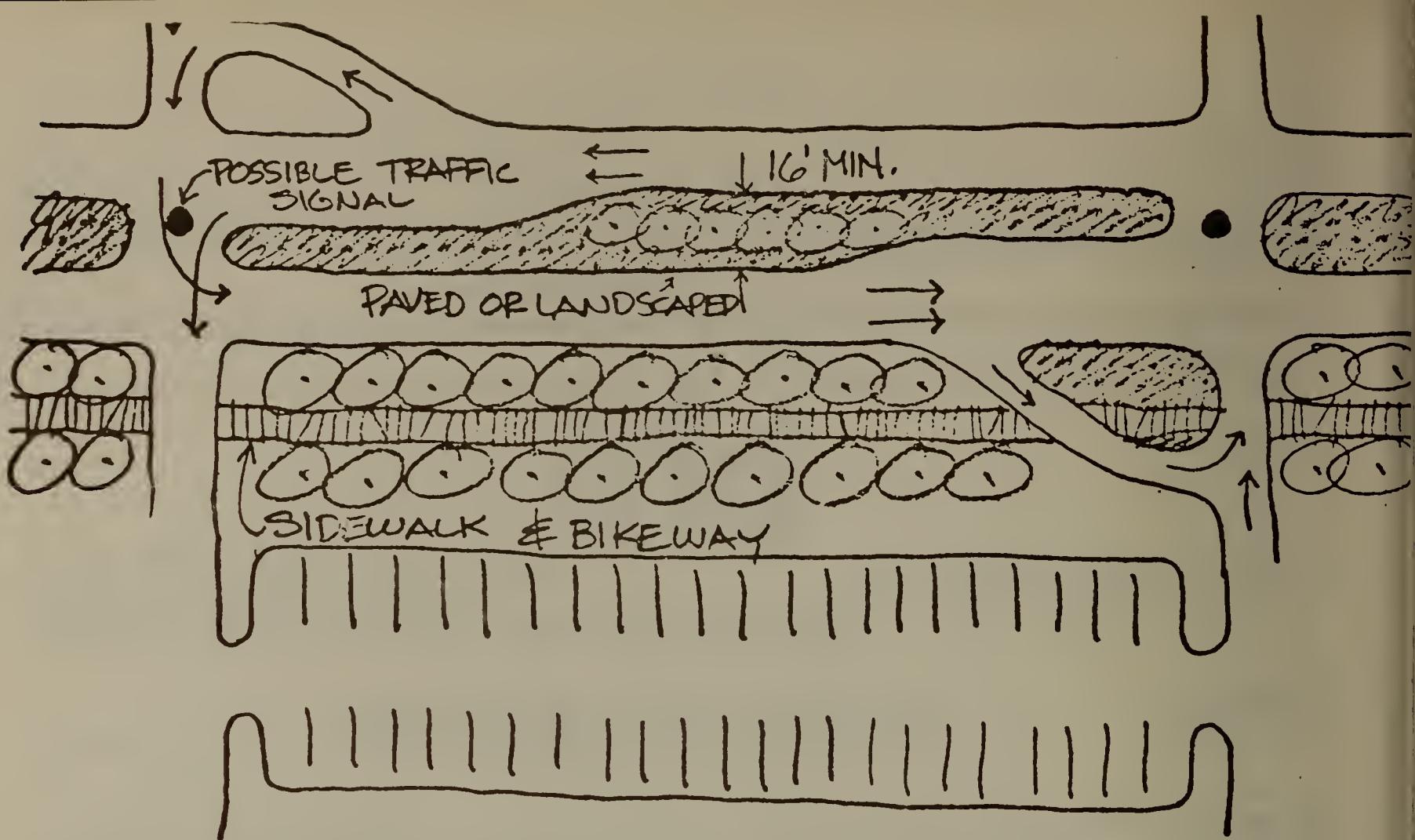


FIGURE 13. ONE-WAY DRIVES WITH "JUG-HANDLE" FOR U-TURN

This concept provides for one way drives and jug-handle treatment to accommodate U-turns which are restricted from left turn lanes due to limited roadway width. This concept shows sidewalk, bikeway, and green belts which can be implemented on all of the previous concepts.

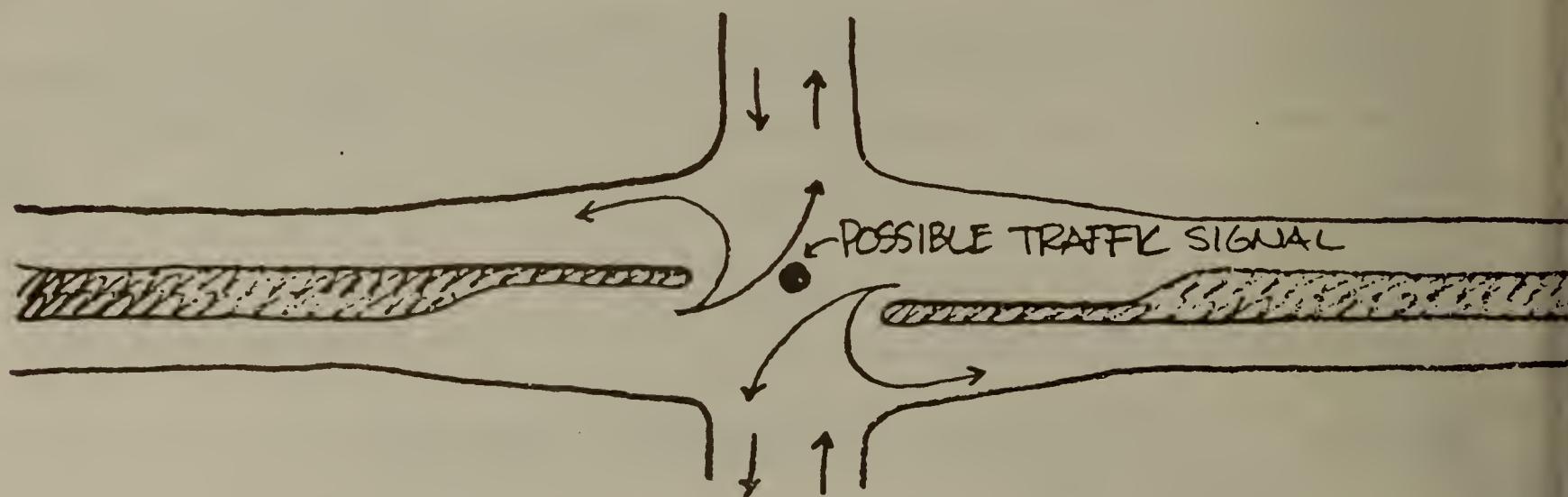


FIGURE 14. WIDENED ROADWAY FOR U-TURNS

This design shows typical left-turn lane with roadway widening to provide for U-turn from left-turn lanes. It can be used when high through volume and high U-turn volumes are expected or when land is unavailable for Jug-handle treatment.

BIKEWAYS

The design criteria in this section pertain to bikeway design; although applicable to most situations, local conditions may require special consideration. While well-designed facilities will influence bicyclist safety, the full benefits of these improvements will only be attained in conjunction with an extensive community-wide safety education program.

The following graph shows the relationship of traffic speed and volume to bicycle facility design:

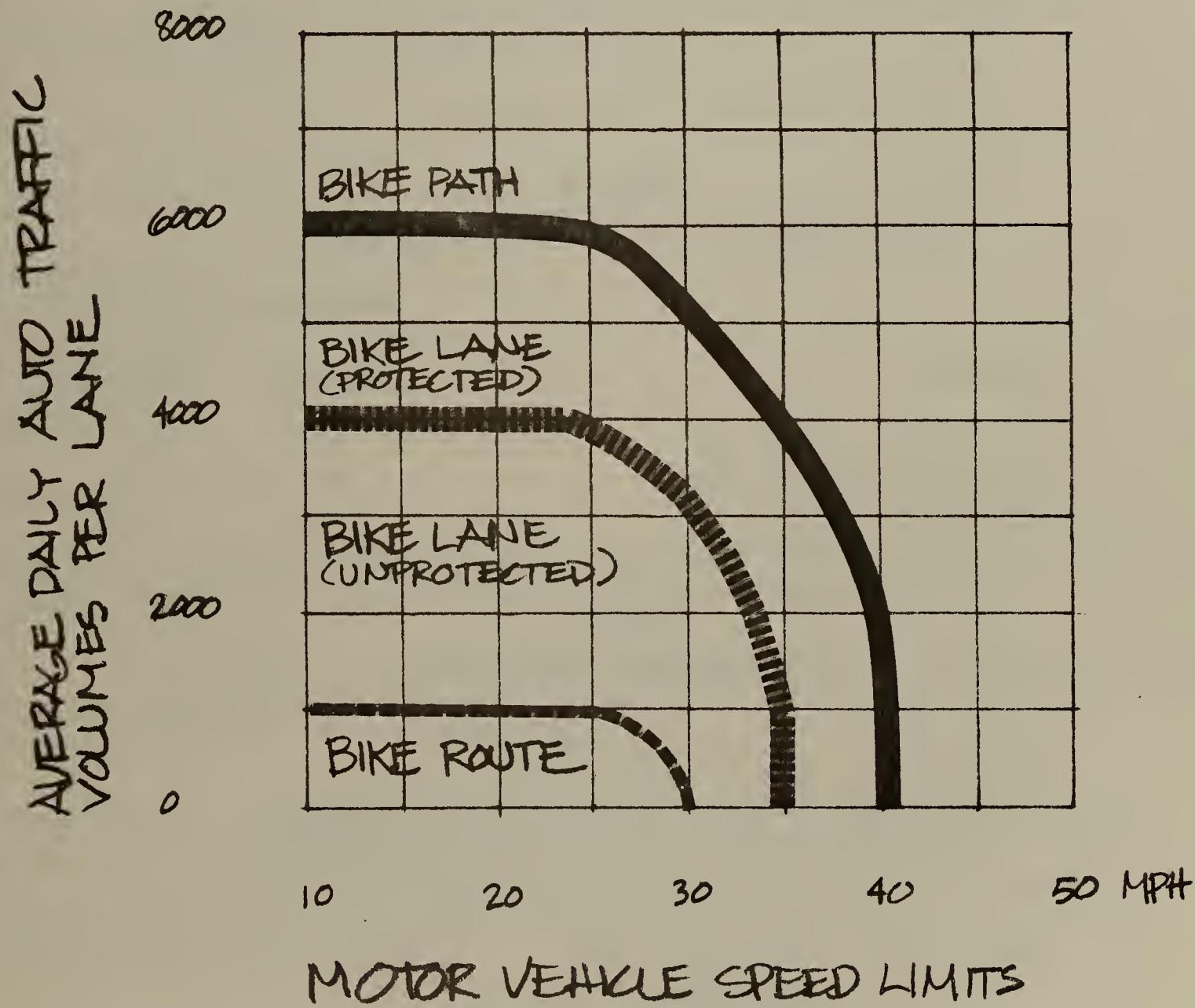


FIGURE 15. RELATIONSHIP OF TRAFFIC SPEED AND VOLUME TO BIKEWAY DESIGN⁽¹⁾

(1) Massachusetts Department of Public Works, Bikeways: Design Standards, 1975.

Recommended guidelines for bikeway design are shown in the following tables:

TABLE 7
BASIC BIKEWAY WIDTHS (1)

<u>No. Lanes</u>	<u>Minimum Width (feet)</u>	<u>Desirable Width (feet)</u>
1	3.5	4.0
2	7.0	8.0
3	10.5	12.5
4	14.0	17.0

TABLE 8
ADJUSTMENTS TO BASIC BIKEWAY WIDTHS (1)

<u>Condition</u>	<u>Additional Width (feet)</u>	<u>Minimum</u>	<u>Desirable</u>
Raised curb on one side	0.5	1.0	
Raised curb on both sides	1.0	2.0	
Parked cars adjacent	2.0	2.0	

TABLE 9
GUIDELINES FOR DESIGN

Design Speed -	20 miles per hour
Minimum Curve Radii -	50 feet
Superelevation -	Minimum 0.02 feet/feet Maximum 0.12 feet/feet
Grades -	Less than 5% when possible Maximum 10%
Clearances -	Lateral: 2 feet Vertical: 8.5 feet
Signing -	See <u>Manual of Uniform Traffic Control Devices</u> (2)

(1) American Association of State Highway & Transportation Officials, Guide for Bicycle Routes, Washington, D.C., 1974.

(2) Federal Highway Administration, Manual on Uniform Traffic Control Devices, Washington, D.C., 1971.

PARKING

Because parking in a highway business area is usually "on site" (off-street), necessary improvements are generally on private property. These improvements include:

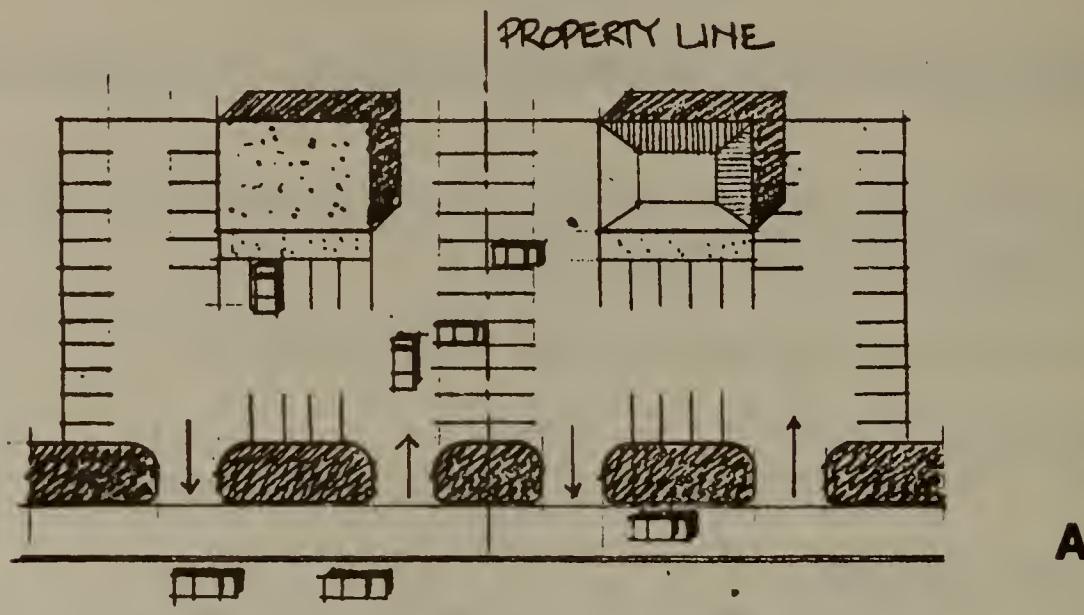
1. Shared access, reducing the number and spacing of curb cuts, and/or alignment of cuts.
2. Design of internal circulation patterns, both pedestrian and vehicular, with special regard for separating the two.
3. Division of the access and parking from the travelled ways.
4. Space delineation.
5. Surfacing.
6. Landscaping.
7. Lighting.
8. Internal signing.
9. In some instances, relocation of parking to the rear of buildings or to the side where the area can be shared with adjacent businesses.

To assure consideration of these factors, regulations have been drafted governing the design, construction and maintenance of off-street parking and loading areas (See Attachment C).

In many existing strip areas there are no barriers at the property line or street right-of-way line. Because of the lack of landscaping at the streets' edges, lights from cars in the parking lot often shine on the streets, interfering with the driver. Cars enter or exit at any point, contributing to accidents and the appearance of disorganization.

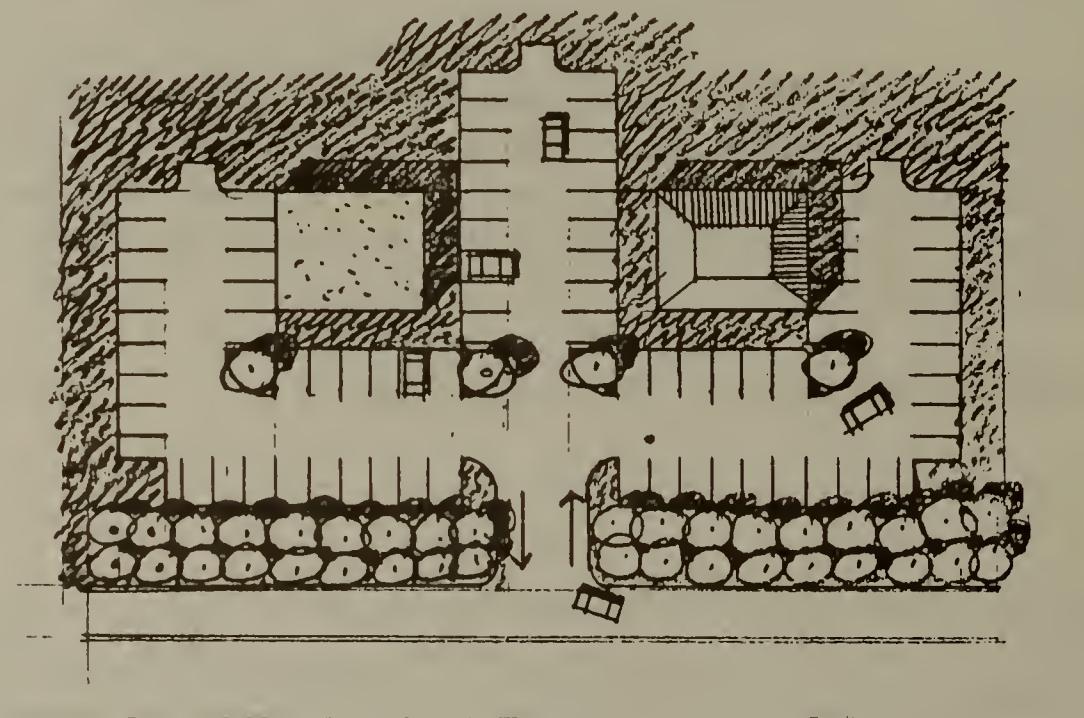
A. Separation of Entrances and Exits:

Modest improvement can be made on the conventional strip by separating entrances and exits.



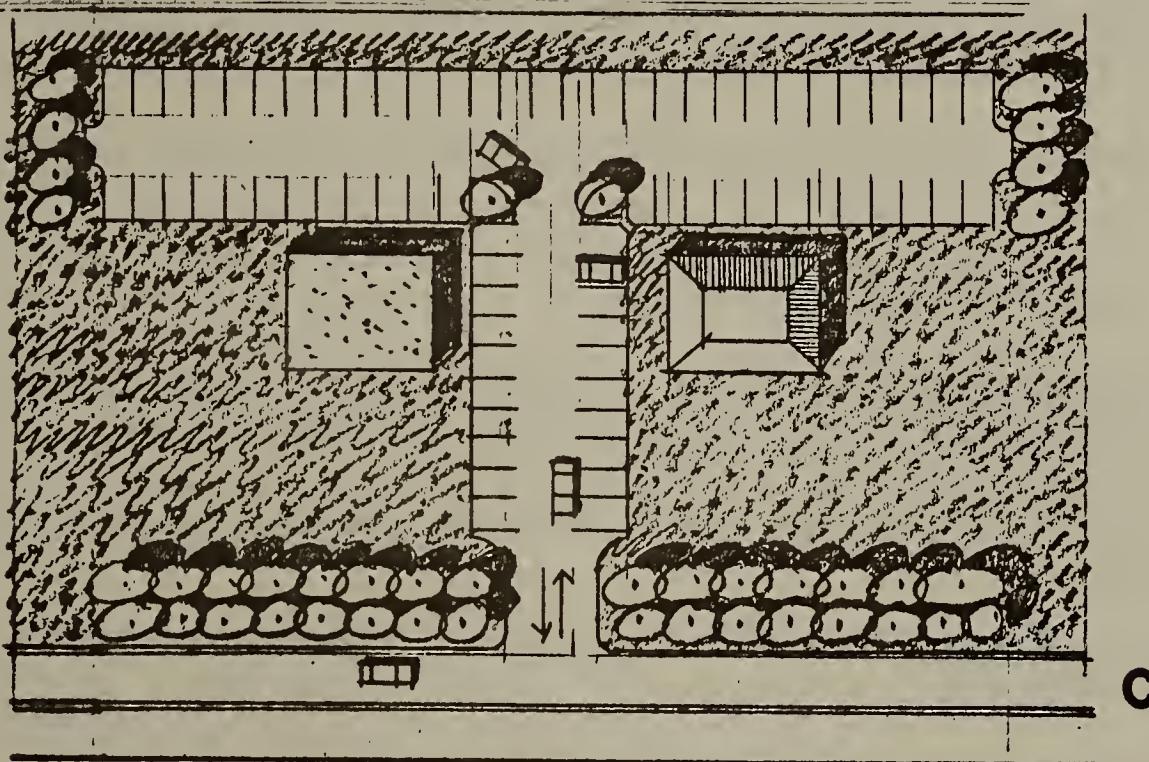
B. Shared Driveways and Parking:

Shared access and parking with the shared area along the property line increase safety and improve appearance. The design can reserve area for landscaping along the street. The number of spaces may be increased by extending beyond the rear building line.



C. Shared Parking in Rear:

Further design improvements can be made by placing all parking at the shared property line or in the rear of the buildings. The front of the building can be landscaped more effectively than when it is disrupted by parking.



APPEARANCE

Highway business strips can be relieved of their characteristic unattractive appearance by:

1. Determining a style or character which is appropriate to the community in which the strip is located.
2. Landscaping parking and median strips, and planting street trees which are indigenous to the area.
3. Placing wires underground.
4. Opening views to attractive and/or undeveloped areas.
5. Coordinating business by clustering buildings and encouraging facade treatment which is compatible.
6. Designing and installing harmonious street furniture, to include uniform sign frames, light standards, litter receptacles, benches and bike racks.
7. Coordinating the design of adjacent developments and the juxtaposition of drives, parking areas and types of business.
8. Controlling the spread of the strip, particularly spread in a manner which is noncontinuous or intrudes on established areas.

BUSINESS GROWTH AND DEVELOPMENT

The business climate along the strip can be improved by:

1. Establishing a character for the area which will enable customers to identify with it as they now do to other business areas - shopping centers, the neighborhood business area, or downtown.
2. Improving traffic flow and circulation so that it is easier and safer to use the strip.
3. Opening additional land for business.
4. Placing discernible boundaries on the strip or distinct areas of the strip so that businesses can organize to promote the area.
5. Intensifying business in the area at the same time the spread of the strip is controlled.

GENERAL APPLICABILITY

It is unlikely that a community would desire to incorporate all of the suggestions for improvement of a strip included in this report. One or more in any or all categories can be used to effect change to the degree and at the rate desired. Political receptivity may affect the extent of the local improvement program.

APPLICATION TO WILLIAMSTOWN

At the beginning of the project the Williamstown Planning Board made several policy decisions:

1. that public improvements should be made in the existing right-of-way, eliminating the need for land takings.
2. that overhead signs and traffic signals should be avoided, as they are inimical to the rural character of the mountains and the concomitant tourism.
3. that appearance should be enhanced to increase the livability of the area but also to increase tourism.
4. that safety of design should not be sacrificed for the convenience of the individual.
5. that Williamstown must provide area for business expansion. (1)

(1) It should be noted that, in Williamstown, this is a primary consideration because of the limits to and the contraction of the Spring Street business area.

6. that first attention must be given to the area along Route 2 where the most accidents occur.
7. that, wherever possible and appropriate to the goals of this study, the solution should build upon the recommendations of the TOPICS program.

The recommendations of the previous TOPICS program were reviewed and evaluated within the framework of the policy decisions. This plan called for a wider paved area, and turning lanes, with markings on the pavement.⁽¹⁾ The recommended improvements are adequate to handle the present traffic, but were found to have too much pavement surface, to make no provision for landscaping and snow storage, to require overhead signing, and to lack the aesthetic appeal and definition desired. Because it did not coincide with the policy decisions, it was decided not to accept the solutions but rather to build on the TOPICS study and develop a more effective solution.

A loop road was also considered. However, because it would necessitate traffic signals on Route 2, detailed study was deferred until, or if, the traffic volumes increase dramatically.

Two other alternatives were selected for further study and are advanced in this report.

Alternative One, the boulevard plan, was the scheme selected by the Board for further study.

Alternative Two, a service road, which, although advantageous in terms of meeting the objectives, has the disadvantages of being more difficult to implement and requiring some traffic signalization.

(1) Pavement markings are not visible during and immediately after snow storms.



Route 2: Proposed Changes

ALTERNATIVE ONE

This alternative (Scheme I, on page 50) incorporates the shared drives (page 23) and cluster (page 24) development concepts. It provides for traffic separation and aesthetic improvements. It achieves all the objectives of the Planning Board, and is consistent with policies of various Town Boards and all traffic and circulation requirements.

Construction

This scheme calls for a parkway or boulevard-type highway, widening and reconstructing Route 2 within the present right-of-way from Adams Road on the east to Adams Road on the west; reconstructing the roadway with two (2) twenty-foot wide through roadways; a fourteen-foot wide landscaped median with ten-foot wide left turn lanes provided at the major drives; and limited consolidation of driveway cuts. (The actual location of drives to be retained and drives to be eliminated or consolidated will be determined in the engineering design stage of the project. The indication in the scheme is for illustrative purposes only.⁽¹⁾) These dimensions allow for a thirteen-foot wide buffer zone on each side of the roadway within the existing eighty-foot wide State Highway layout.

(1) Every attempt will be made in the design stage to minimize the impact of closings.

Adequate storage for left-turning vehicles and a reduction in the total number of drives will greatly reduce the accident potential of the roadway. As much as a thirty-three percent reduction was found in a Michigan Study. (1)

Provisions for U-turning vehicles are not incorporated in this scheme. Up-to-date traffic counts of turning traffic and through traffic will be needed before determining the need for U-turn provisions. If required, a U-turn lane can be provided through the fourteen-foot wide median, or "jug handles" can be incorporated at each end of the commercial strip.

The median will provide separation of traffic, reduce accident potential, increase the attractiveness of the area, and provide an area for snow storage. It can be planted with low-growing, winter-resistant material and some flowering material which can be trimmed to proper height. It should be noted that a median is more pleasing than uninterrupted pavement and is more effective in traffic control than lane markings on pavement, which can be covered by snow.

The buffer zone will provide adequate width for plantings, street hardware, signing, a six-foot wide sidewalk on the south side, and a six-foot wide bikeway on the north side. (2) The latter will relieve one of the traffic problems and hazards recognized by the Police Chief. The combination of sidewalk and bikeway will reduce automobile trips and thus reduce traffic pollution. Instead of providing bikeways in some cases, bicycle lanes can be marked on the paved roadway shoulder, if desired. This is not recommended in Williamstown because of the high volume of through traffic carried by Route 2.

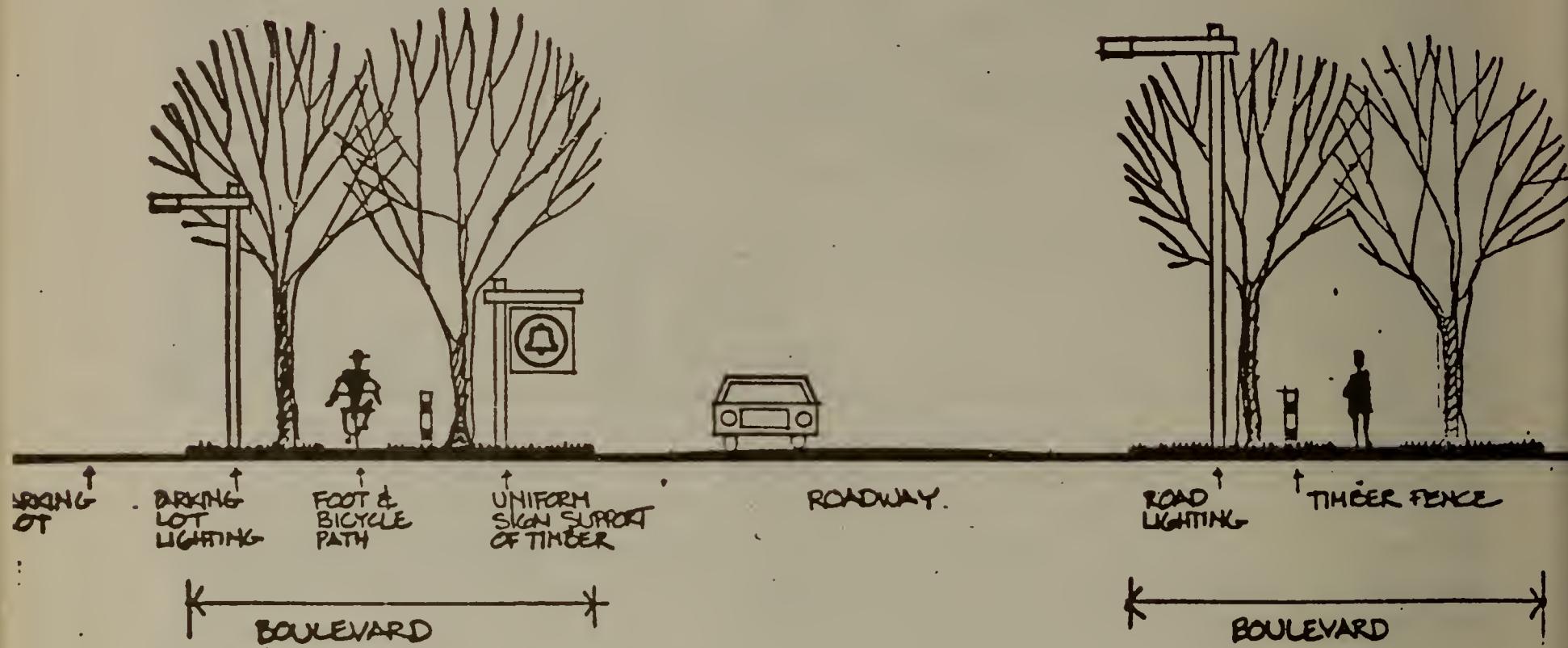
The result of this proposal is the continuation of the boulevard appearance of Main Street and a greatly improved appearance to the first business area in the Commonwealth reached by tourists from Vermont and New York State.

(1) Max R. Hoffman, "Two-Way, Left Turn Lanes Work!", Traffic Engineering, August 1974. An additional reduction is expected in Williamstown because a median strip is proposed.

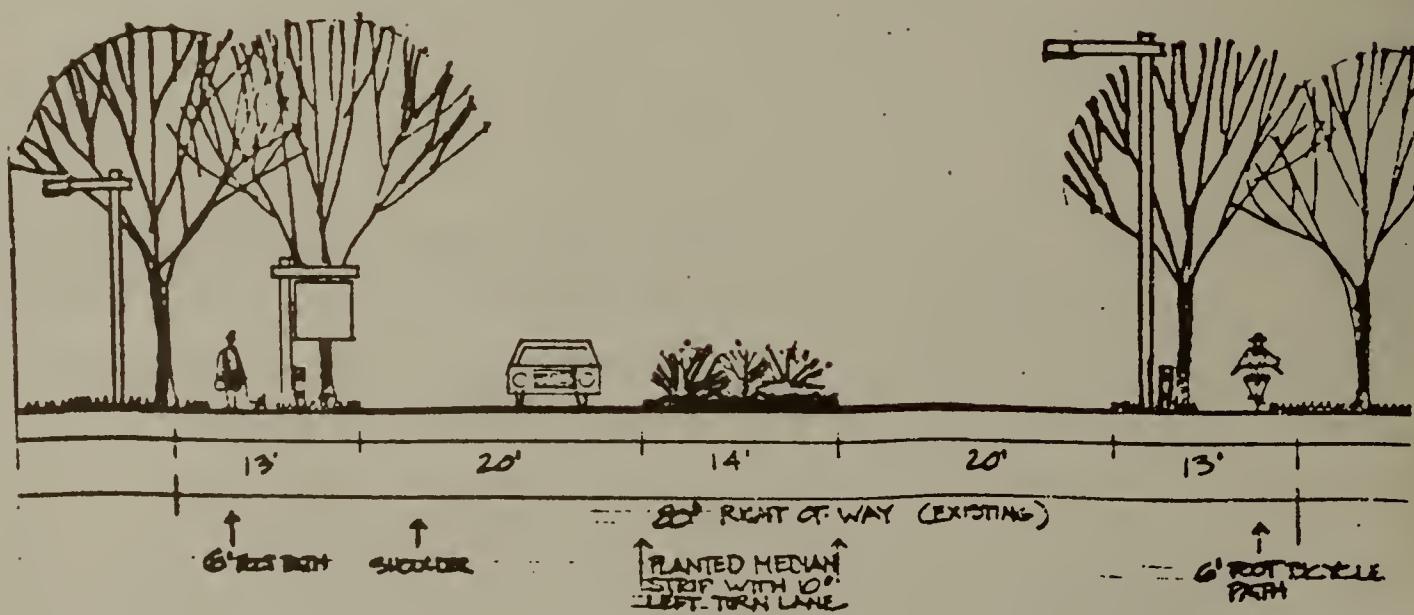
(2) In addition, a bikeway on the south side can be constructed at a later date if desired. However, it is not recommended that it be deferred. For references on increased bicycle usage, bikeway criteria and design, see references in the Appendix. Note particularly Safety and Location Criteria for Bicycle Facilities, published by the Federal Highway Administration, and the various publications of the Massachusetts Department of Public Works.

BOULEVARD SECTIONS

A. Boulevard section without median:



B. Alternate section with median:



Parking

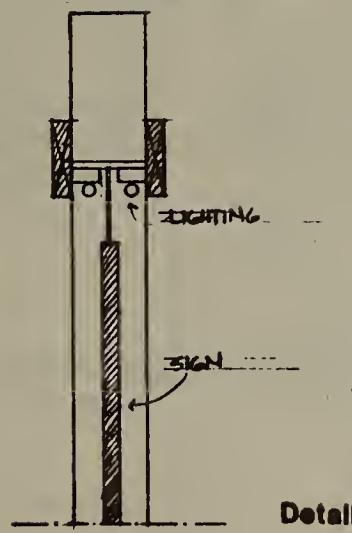
Parking areas should be redesigned to be served by shared access drives. Plantings, lighting, signing and bikeways should be installed. The areas should be improved with bay design and bumpers to reduce the number of minor accidents which occur in parking lots.

Appearance

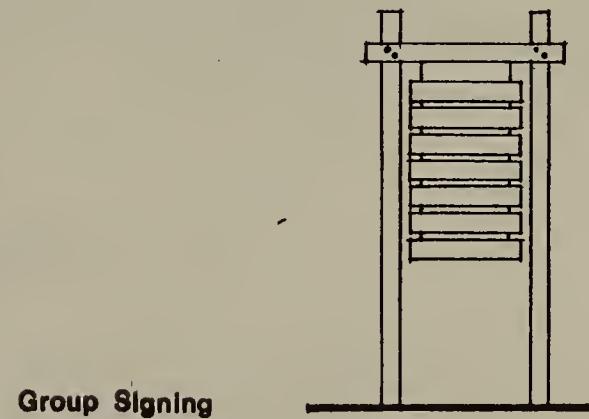
Standards for plantings, street furniture, and signing should be adopted by the Planning Board. Mountain ash is a suitable street tree. Hedges should be planted of indigenous materials to be consistent with the mountain area. In the course of this study redwood and cedar have been recommended for fences, signs and street light supports. Light standards have been recommended with fixtures and lights which deflect light downward to minimize sky lighting and glare on adjacent properties.

Uniform sign frames from which trademarks and other individual signs can be hung are proposed to reduce the cluttered effect.

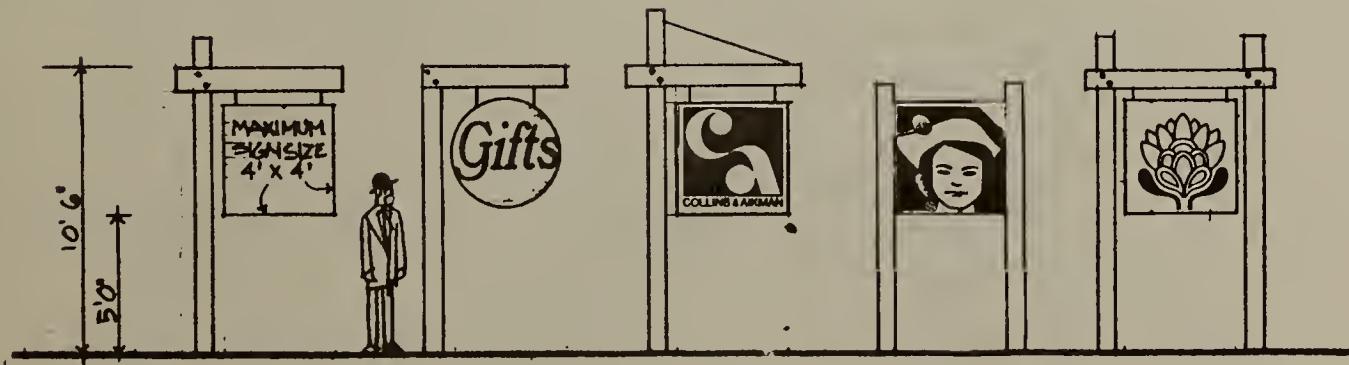
Litter receptacles should be installed. Utility wires can be placed underground at the time of reconstruction. Driveway entrances should be landscaped. Businesses should be urged to screen outdoor storage areas, and the power substation requested to screen with trees and landscape planting. Benches should be placed along the buffer strip. A pedestrian bridge across the small stream should be installed in the same style as the street furniture. Plantings should be placed in the median and buffer strips. Easements should be acquired at the rear of the proposed sidewalk for additional plantings.



Detail



Group Signing



Uniform Signing

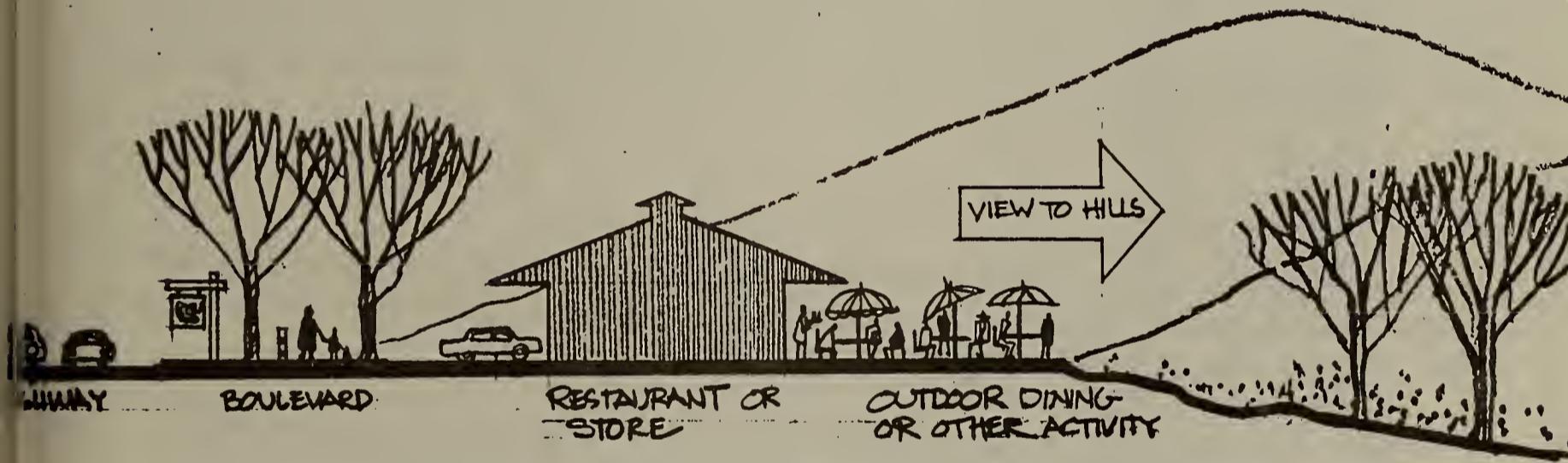


FIGURE 16: SCHEME I
 CONTROLLED ACCESS WITHIN EXISTING RIGHT-OF-WAY

Business Growth and Development

Designate areas for each general category of business. This will concentrate like businesses which in turn will increase competition. It will also prevent one type intruding on another. See Page 22. Businesses can be oriented to the mountains, increasing the attractiveness and desirability of the sites at the same time as business areas are augmented. Restaurants in particular profit by such an orientation.

The increased accessibility and attractiveness of the entire area will increase business. (1) The addition of walkways will enable people of all ages to have an alternate means of transportation, to walk for convenience and health, and will provide opportunities for social interaction.



Orient Businesses To Mountains

Grouping of businesses as shown on the cluster concept will enable business on the strip to grow with a minimum increase in energy requirements for lighting or for the private consumption of gasoline which results from multi-stop shopping.

(1) See page 49.

ALTERNATIVE TWO

This alternative, shown on pages 53 and 54, incorporates the service road concept (page 25). It achieves all of the Planning Board's objectives and opens considerable land for development, but is not consistent with two policy decisions: it requires land takings for the road and traffic signalization is necessary.

Traffic and Circulation

Construct Scheme II, or Scheme III, shown on pages 53 and 54. These schemes call for the same roadway dimensions as Scheme I, but eliminate most of the left-turn bays at major drives. Instead, Scheme II calls for a two-way access road which will connect Route 2 to an east-west service road along the rear of the existing businesses. (1) The access road would extend from the eastern end of the present strip behind the business properties to the Grand Union parking area. Unlike Scheme I, this plan necessitates some traffic signalization and thus is inconsistent with present policy. However, it has compensating advantages, primarily increasing the depth of the business area (see below).

Scheme III has a service road to the area of the properties with a two-way access road in the center of the business strip. Curb cuts are not the same as shown on Scheme I, but parking remains the same. Adjustments in the design stage can be made, if the Town determines to proceed with this alternative instead of Scheme I.

Appearance

The improvements recommended for Alternative One can also be applied with this alternative. The traffic signals may be affixed to wooden supports which are the same style as other street furniture.

Two traffic signal installations may be necessary with Scheme II and one with Scheme III, at the intersections of the proposed access road with Route 2. (2) These signals will provide for left-turning traffic and for pedestrian crossing.

Business Growth and Development

The access road will make it possible for business to expand. Signing near the intersections will advise the driver of the shopping area (e.g., "TURN HERE FOR LOCAL STORES"). Additional expansion area can be provided on the south side of Adams Road. This potential expansion has been considered in the development of highway solutions.

(1) A frontage road was rejected in the course of this study because it was found that existing buildings in the study area have inadequate setback.

(2) See Figures 17 and 18.

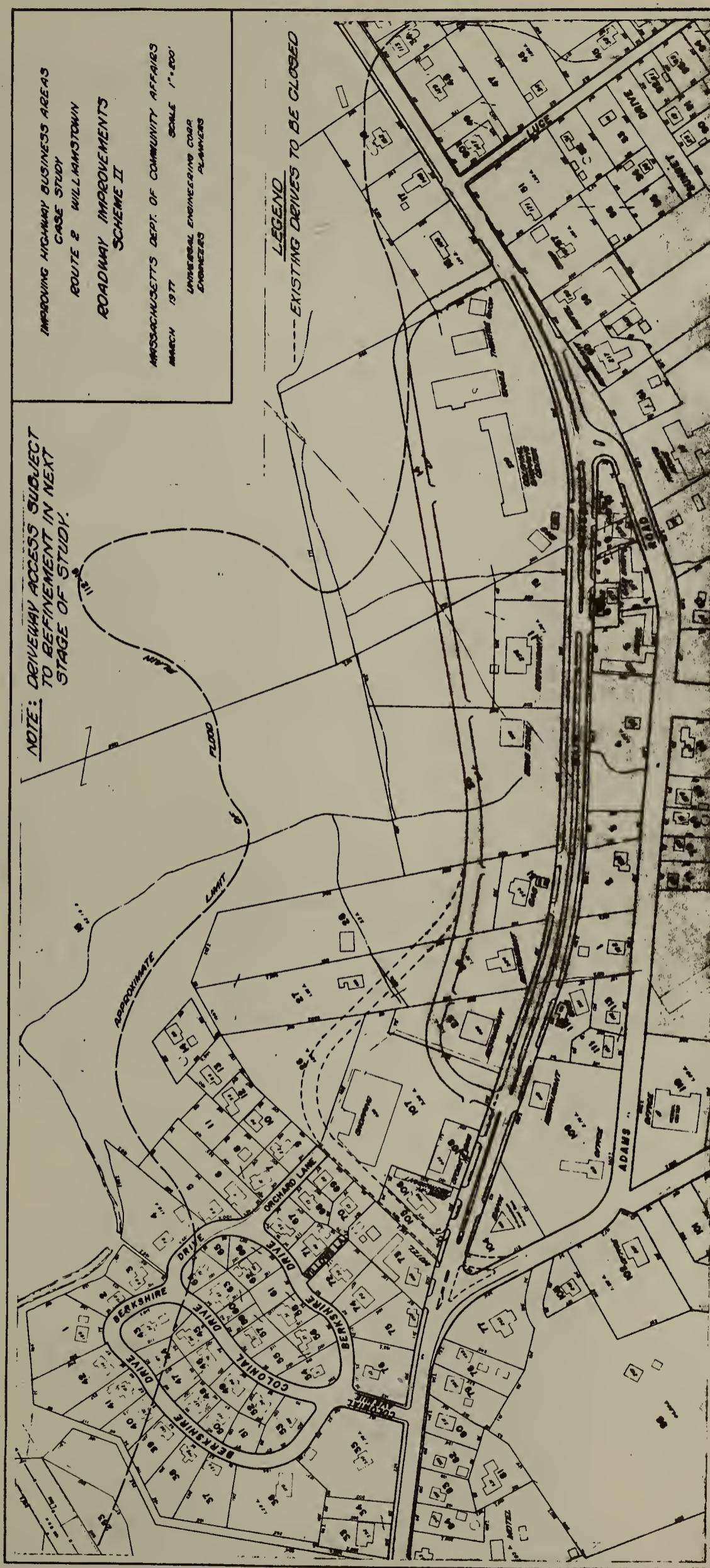


FIGURE 17: SCHEME II
 TWO-WAY ACCESS ROAD WITH TWO ENTRANCES/EXITS

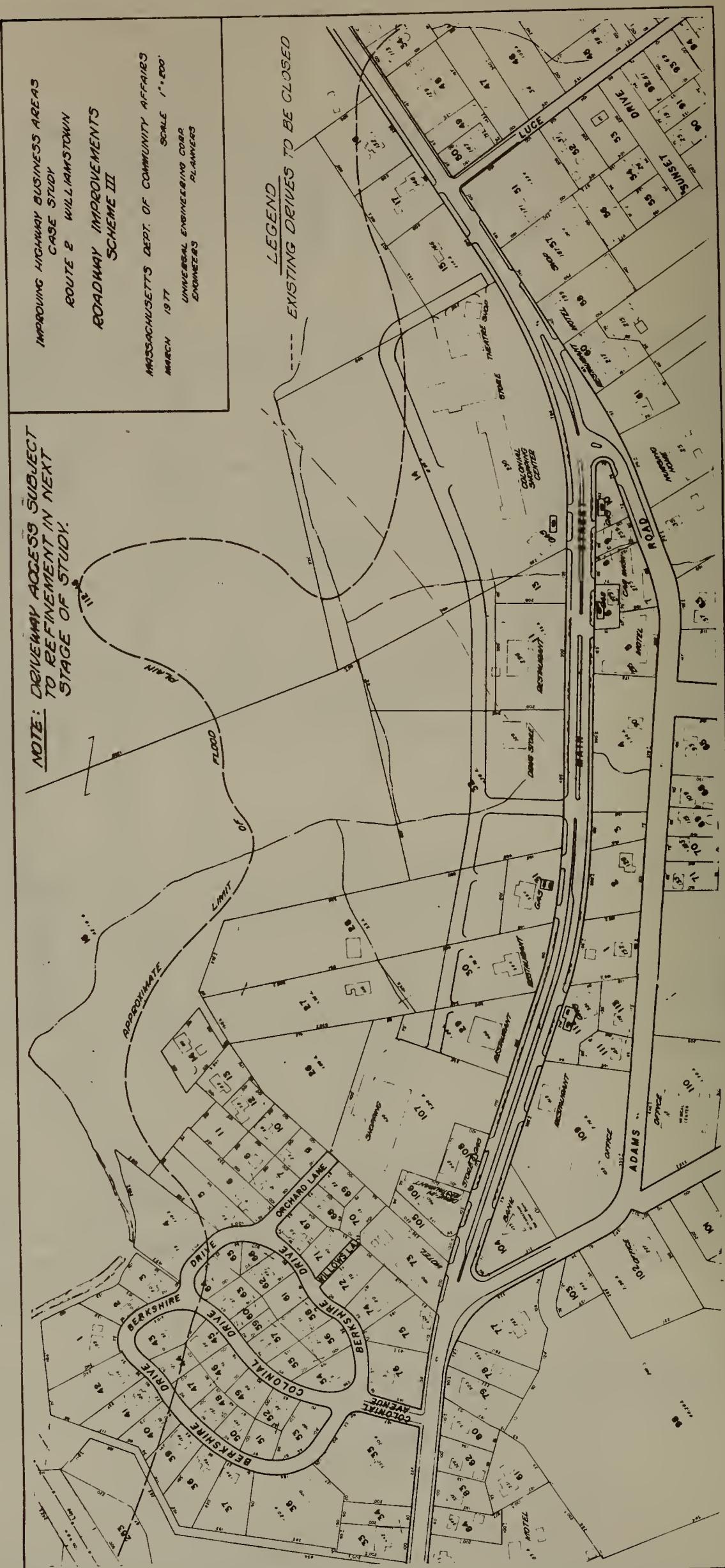


FIGURE 18: SCHEME III

PART THREE - IMPLEMENTATION

The solutions presented in this study are conceptual in nature. To apply them to an existing strip, a study of conditions is required, as has been done in the case of Route 2. To implement proposed improvements, a phased program is required.

GENERAL

The first step in improving a highway business area is to determine the type of problem which exists, available remedies and levels of responsibility. The following material illustrates commonly found situations; the board, department, private or public body responsible for correcting the situation if correction is desired; and the recommended steps or action to be taken.

<u>Situation (If the Situation Exists)</u>	<u>Responsibility (Who)</u>	<u>Action (Does What)</u>
Incremental unplanned land use	Planning Board	Adopt development plan
Low assessed values	Planning Board	Undertake land use study Conduct survey of businessmen
Unattractive appearance	Businessmen's Association and appropriate Municipal Department(1)	Adopt design standards Install improvements
Poor traffic flow	Department of Public Works(2)	Add turning lanes Construct service roads
High rate of rear end collision	Department of Public Works(2)	Install median strip Impose shared drives or bypass Add left-hand turns
High rate of turnover	Businessmen's Association	Conduct promotion campaign

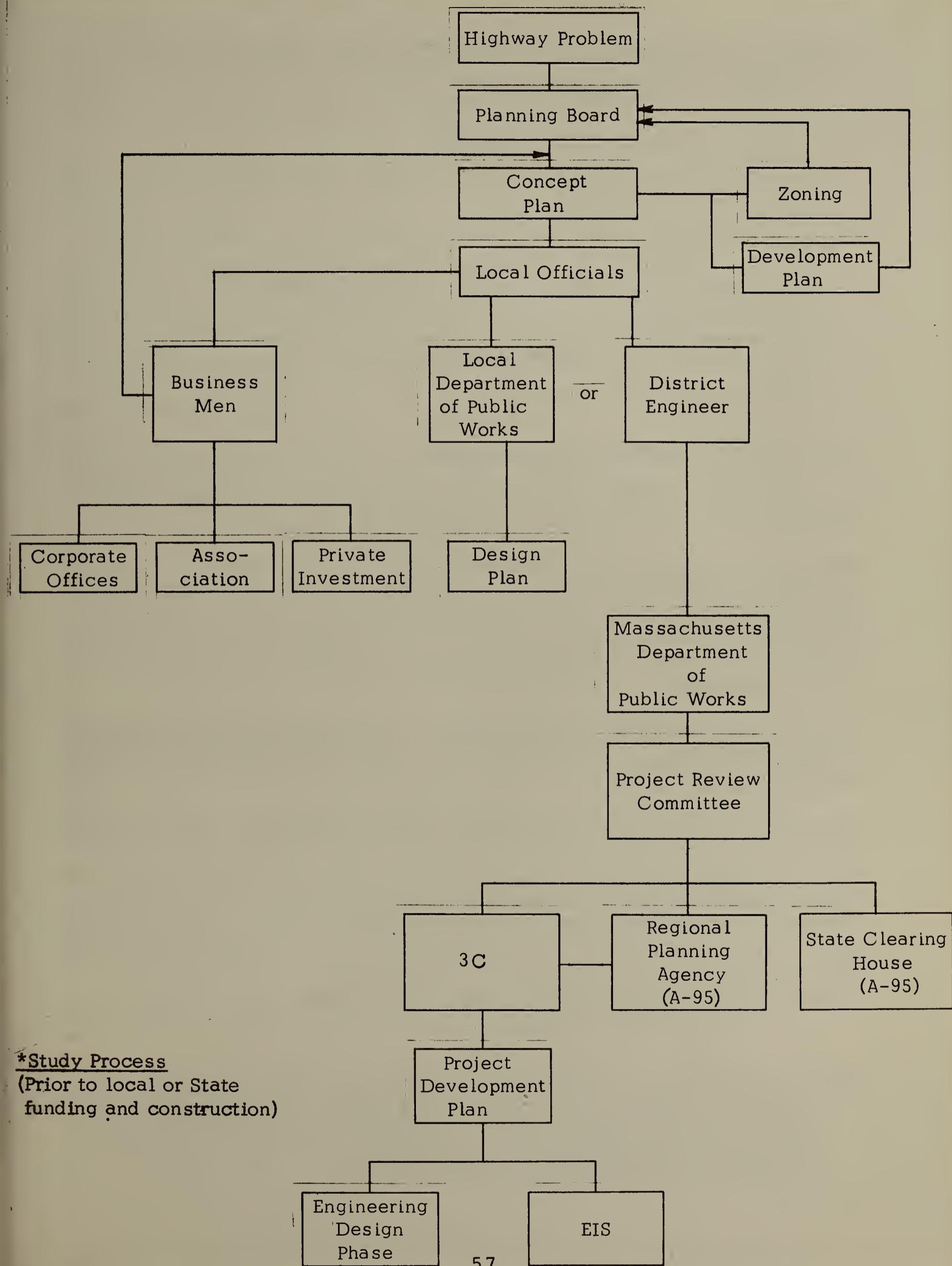
(1) Public Works, Parks, Planning Board.

(2) State or local depending on category of road.

<u>Situation (If the Situation Exists)</u>	<u>Responsibility (Who)</u>	<u>Action (Does What)</u>
High rate absentee owners	Businessmen's Association	Involve owners in design
Insufficient clustering of business or near development	Planning Board and Business	Adopt development plan Construct new business in cluster Rezone to separate inappropriate uses
Right-of-Way is narrow, or opportunity for flexible design is lacking	Planning Board	Study use of bypass or service road
No pedestrian separation	Department of Public Works(1)	Provide protection barriers and sidewalks
Signs lighted, moving, distracting	Legislative Body(2)	Adopt sign by-laws
Glare on road	Corporate	Shield lights from parking areas or other sources
Undefined parking areas	Corporate	Design parking areas
Undefined street edge	Department of Public Works(1)	Add curbing
No landscaping	Corporate	Install landscaping
Overhead wires	Department of Public Works and Utilities(1)	Underground wires

(1) State or local depending on category of road.

(2) City Council, Town Meeting or other responsible body.



In general, municipalities with a strip which warrants improvement must:

1. Undertake a design study;
2. Determine available funding programs;
3. Adopt an improvement plan;
4. Adopt appropriate zoning, design regulations and other land use controls;
5. Make necessary land takings, if any, and obtain releases and improvement easements;
6. Arrange shared drives and parking areas;
7. Construct improvements;⁽¹⁾ and
8. Encourage organization of businessmen.

To achieve the improvements proposed by this study, the cooperation of the State, the Town and the merchants is required. (See Flow Chart.)

The role of the municipality is that of the catalyst and/or coordinator for a project to improve the strip. It must provide leadership, enact zoning and other regulatory controls, and in some situations design and construct highway improvements. To stimulate private cooperation, the municipality can augment its program with incentives and/or improvement awards. Easements can be acquired to place improvements on private land.

In some communities urban renewal powers can be utilized, especially through the State-aided Chapter 121B program which pertains to blighted open and commercial areas.

The role of the State, in the event that the strip is located on a State highway, is to design and construct road improvements. It may, in some instances, construct bypass or service roads and new parking areas. The Department of Public Works may place conditions on curb cuts and on conformance to standards for improving highway areas, and, when abutters agree, may build shared access drives. Private shared drives may be made rights-of-way. (Legislation is being filed to clarify this authority.) The Department should be responsible for land takings for bypass roads, where they are recommended.

(1) All construction should be in accord with the standards contained in "The Standard Specifications for Highways and Bridges", Massachusetts Department of Public Works, 1973, as amended. For items not included, the Transportation and Traffic Engineering Handbook should be consulted.

In all instances the applicable State agency should be consulted in the early stages of a project because legislation and policies are subject to change. In addition, it is always necessary to proceed, through the 3C process, through the Regional Planning Agency. (See Flow Chart.)

The role of the private sector involves corporate headquarters and local business alike. Corporate offices must be encouraged to emphasize good design in their site manuals.

The private sector must organize and cooperate to share access drives and parking areas. Utility companies may be called upon to place wires underground. In addition, the private sector and the municipality must work cooperatively to initiate involvement and action by the appropriate State agency (in Williamstown's case, the Department of Public Works).

DESIGN AND CONSTRUCTION

Proper design of improvements, or redesign where appropriate, is the first step in upgrading an existing highway strip. The principal design elements are:

- The highway itself
- Access points to the highway
- Parking areas
- Pedestrian ways
- Landscaping
- Signs
- Building facades

The design study may be conducted by local staff, consultants, the Massachusetts Department of Public Works (in the case of numbered highways), the owners of property, or some combination of these. It is recommended that the Planning Board, with input from local staff and businessmen, prepare concept sketches or plans and then request design studies to be conducted by the appropriate Public Works Department. (See Flow Chart.)

Prior to the initiation of this step, the municipality should consult the Regional Planning Agency to assure conformance with regional plans and with the State Department of Public Works to determine the applicable programs, procedures and funding, if any.

Construction is another area of shared responsibility. For example, the appropriate parties to implement each of the above design elements are:

The highway - Public Works Department

Access points - Public Works Department

Parking area -	Businessmen (or in some cases where an easement is given to the municipality, the Public Works Department)
Landscaping -	Right-of-way: Public Works Department Business properties: businessmen
Signs -	Businessmen
Building facades -	Businessmen

ZONING

Zoning is a valuable tool of land use control which can be exercised to prevent further degradation of highway strips, to control extension of the strip and to control traffic congestion. The zoning controls recommended for community consideration are:

1. Districting to separate highway tourist-oriented business, retail sales and bulk sales. This may be done by establishing special districts: Tourist Business, Highway Commercial, Shopping Center.
2. Creating greater depth, and shortening the strip frontage.
3. Adopting intensity zoning, which limits floor area per acre or number of trips per day. (See pages 27 and 28.
4. Establishing a site plan procedure to assure consideration of all desired site elements.
5. Establishing a design and environmental review procedure to assure consideration of all desired design and environmental elements.
6. Establish a development district.
7. Create a zoning system of incentives.

The items included in the zoning text will vary with the community characteristics and its goals. For instance, a community with a strip in a scenic valley will include view lines; one with a strip along a railroad may interrupt the retail area with a commercial or wholesale area; one adjacent to an historic area may incorporate historic controls or design controls in a transition area.

The suggested zoning tools are not unique, but they do require some degree of expertise and competence. A Planning Board should use experienced staff or consultants to prepare the provisions.

Zoning can be accomplished by the community itself to improve the quality of new development. Sample by-law provisions are found in Attachment C.

Control of Future Strip Development

This study has addressed existing strips. The zoning techniques described can be applied to raw land, to prevent strips from developing in the future. Of particular value in such a forward look are establishing depth to commercial areas, controlling access to the highway, and adequate site and design controls. In addition, communities should undertake an aggressive program to enforce the land use controls it has adopted which pertain to the commercial strip.

MISCELLANEOUS IMPLEMENTING TECHNIQUES

Land Banking by the municipality for the potential service road can be undertaken as site plans are presented for approval. (The Planning Board also may require reservation of right-of-way or easements to be shown on subdivision plans.)

Releases from liability can be acquired from land owners so that the municipality can plant street trees outside of the right-of-way.

Standards for signing and street furnishings can be prepared and adopted by the Board of Selectmen, City Council or other appropriate body.

Improvement easements can be acquired to allow the municipality to go on private property and make improvements in parking areas, street furniture and landscaping.

Incentives can be offered by the municipality to the businessmen on the strip to landscape properties and to share drives and parking areas. For example, to further the plan the municipality can agree not to assess improvements made. It is assumed that the increased value of undeveloped land on the strip will more than offset any unrealized assessments. In addition, the municipality can agree to maintain and plow the drives and parking areas for a reasonable period of years, as is done in trash collecting.

Tax credits can be used to encourage facade improvements, changes in existing signing, or other improvements on private property.

View easements can be obtained to assure visibility of natural features (this may be unnecessary where a design plan is adopted), or view lines can be established in zoning.

An association of businessmen can be formed to improve and promote the business area. Among its objectives should be:

- Cooperation on signs
- Shared drives
- Shared parking areas
- Maintenance agreement with the municipality (see above)
- Seasonal promotions

The municipality can provide leadership and staff assistance to this group.

Betterment assessments can be utilized to pay for public improvements.

Capital improvement programs can be used to set aside funds on a regular basis to improve the area, and to systematize improvements to achieve objectives of improving the highway strip.

Signs by-law changes can be made to allow signs closer to the road, if they conform to the design adopted. Signs along the right-of-way will be off-premise signs and may also be subject to State control. This is another example of areas where State and local cooperation is required.

SYNTHESIS

No one implementing technique will suffice by itself. For example, the Public Works Department can bring about some shared drives at the time of construction; businessmen may do some drives cooperatively or with incentives offered by the municipality; or the municipality may require them for new construction. Conceivably, this combination may not reach a one hundred percent achievement of shared drives; but the existing situation will have been vastly improved to the point where sufficient momentum would likely convince the remaining holdouts.

FUNDING

A variety of funding sources are available to implement highway improvement:

Federal Highway Act - A demonstration grant, if available, or other eligible funding can be used for improvements in and adjacent to the right-of-way. (1)

Chapter 90 - The State may finance one hundred percent of the cost of projects on the Chapter 90 primary system (1977 Transportation Bonding Authorization - 1978 and 1979 expected to pass). (1)

Community Development Block Grant - Application can be made on a fiscal year basis for programs as well as physical improvements.

Revenue Sharing or Other Local Funds - Local appropriation can be made for any eligible aspect of the plan.

Emergency Employment Act - Application can be made for funds for physical improvements. (1)

(1) It is necessary to investigate these programs in order to ascertain if funds are available, changes have been made, or new programs adopted before proceeding.

Local Businessmen - Organizations can raise/assess money for any aspect of the plan.

Construction costs cannot be determined until the engineering design is complete.

A community can proceed with preparing zoning changes, developing the design plan, and acquiring easements for those items which are not dependent on the engineering plan and right-of-way construction. For these items, planning services of the municipal counsel will be needed. They can be funded out of the current budget, utilizing of gifts, current revenues, available surplus funds, and Community Development Block Grants, singly or in combination.

Each of the above steps is discussed in further detail, as it is applied to Williamstown, in the following pages.

APPLICATION TO WILLIAMSTOWN

The following action plan is proposed to implement the solutions offered for Williamstown.

DESIGN AND CONSTRUCTION

An engineering design study should be undertaken immediately, and construction of the recommended highway and roadside improvements should take place by Spring of 1978 at the latest.⁽¹⁾ The cooperation of the State Department of Public Works should be obtained at this point to assure that there are no unnecessary access points to the redesigned highway and to condition permits for shared drives on the elimination of drives replaced. Where necessary for highway safety, the Department should close drives and establish the shared drives.

Route 2 is classified as a principal highway under the "1972 Functional Classification of Highways" by the Massachusetts Department of Public Works and, as such, is eligible for one hundred percent funding for improvements within the right-of-way (Federal Highway Act). This funding should be requested by the Town, if available (see sample letter, Attachment D). Again, it is noted that the State Department of Public Works should be consulted prior to the inception of a project to ascertain the current status of funding programs.

The business area improvements program should be continued to Water Street. Water Street itself should be subjected to a study similar to the Route 2 Study initiated by the Planning Board.

A design element should be prepared and incorporated in the Town Environmental By-Law to help assure good site development for new businesses.

(1) The Town can provide supporting materials e.g., utility maps and plans.

ZONING

Zoning changes are needed to accommodate the general land use pattern. The area bounded by Adams Road and Route 2 should be rezoned as "Tourist Business", except for Lots 104, 109 and 111. A new "Professional Office District" should be established, to include those lots and the area on both sides of Adams Road. In addition, the zoning of the mobile homes park (now "Business District") should be rezoned as a "General Residence District."

The remaining present Business District on Route 2 should be amended to include design review for new construction. Design requirements should include:

1. Facades of buildings.
2. Windows to take advantage of the views.
3. An internal circulator, fifty feet from the street, with ten-foot wide landscape strips on either side.
4. No independent access points within a specified distance, so long as access from the internal circulator is available; otherwise, independent access would be permitted until the property is connected to the internal circulator.

The zoning should make reference to a development plan which may be prepared and adopted by the Planning Board. The plan should include requirements for building bulk and placement, drives and design features and should relate the density (square feet of floor space) to the traffic handling capacity of the traffic facilities. All plans submitted for approval must be consistent with such a plan. The ground coverage permitted in the district under usual conditions (no plan on file) can be increased by ten percent on land covered by such a plan.

Planned unit development can be adopted for the strip area. This zoning technique permits, upon submission and approval of a plan, a variety of uses and densities which might not otherwise be permitted.

See proposed zoning changes, Attachment C.

Adjustments should be made in the zoning requirements for off-street parking to permit shared area. In addition, design requirements for parking areas should be adopted, including:

- Provision for circulator drives in large areas;
- Prohibition, or limitation to a single row, of parking between the circulator and buildings;

- Setback of parking to a distance sufficient that it would be placed to the rear of building strip, although it would not prohibit additional buildings to the rear;
- Requirement that parking lots be completely interrupted except for sufficient linkage for minimum (one-lane) flow in either direction, at specified maximum distances within rear parking lots;
- Minimum landscaping percentages and landscape details within driveway and parking areas, including egress to circulator.

See Attachment C for suggested regulations.

COOPERATIVE PROCEDURES

To assure improvements on highway strips, inter-agency cooperation is required. The methodology of this Study is recommended:

1. Planning Board meet jointly with the District Engineers, representatives of the Regional Planning Agency and Department of Community Affairs to establish parameters of the problem and study area.
2. Municipality officials and Department heads meet with the Planning Board to provide information and articulate their concerns.
3. Businessmen survey is conducted.
4. Municipality proposal for improvement is drafted.
5. Municipality meets with the agencies involved to review the plans.
6. Modifications are made, as appropriate.
7. Public meetings are held.
8. Additional modifications are made, as appropriate.
9. Municipality requests the State to implement plan.
10. Municipality implements phases which are its responsibility.

(Items 9 and 10 have not yet been undertaken in the case study)

TABLE 10
WILLIAMSTOWN ACTION TABLE

<u>Implementation Item</u>	<u>Responsibility</u>	<u>Schedule</u>
Resolution - endorsing concept	Town	1977
Engineering design	Town Request of State	1977
See Flow Chart, page 57, for	State	1977
State procedures	Initiated by the Town	1977
Acquisition of releases to plant on private property	Town	1977
Preparation and adaptation of development plan	Town	1977
Adoption of zoning changes and regulations	Town	1977
Adoption of design standards	Town	1977
Acquisition of improvement easements	Town	1977-78
Acquisition of view easements	Town	1978
Construction		
Within right-of-way	State	1978
Bikeways	State	1978
Outside of right-of-way	Private/Town	1977-78
Extension of concept study from Stratton Road to and down Water Street	Town	1978
Negotiation of shared drives	State	1977-78
Maintenance		
Agreement for parking areas and drives	Town	1977-78
Tax credit	Town	1978 following

FUTURE STUDIES

To build on the findings of this Study, it is recommended that:

1. The Massachusetts Department of Public Works prepare a design manual for design on highway strips, including provisions for upgrading existing situations to meet standards, and modifying the present geometric standards to relate to the amount of traffic generated at peak hours.
2. A model cooperative agreement be prepared for an owner's association to acquire shared drives, parking, utilities and other improvements; to assume financial responsibility; to acquire easements; to provide insurance, signing and lighting; and to assume maintenance.
3. The Regional Study being undertaken by the Department incorporate the findings of this Study.
4. The Town prepare a development plan for other areas of Town to be used in the same manner as this Study.

CONCLUSION

This Study set out to do the following:

Analyze highway business area characteristics
Analyze highway business area problems
Offer solutions to the problems
Develop tools to influence change
Identify funding sources

Each of these tasks has been performed. In addition, the complex relationships of private and public interests and Town and State have been addressed. The need to use solutions in combination has been made evident. Reasonable solutions have been presented which require leadership from the Town and the Commonwealth working jointly. The case study area is important to the Commonwealth's tourist business and warrants immediate action by the Town and the State. A strong leadership and cooperative role should be exercised by the Department of Public Works, the Planning Board and the Board of Selectmen.

The steps recommended to improve highway business strips can be summarized as follows:

- On Highway:
 - Select concepts to be used
 - Conduct engineering design study
 - Construct improvements
 - Roadway - traffic separation controlled access
 - Shoulders
 - Fencing
 - Walkways
 - Uniform signing and light standards
 - Landscaping
 - Underground wires
- Off Highway:
 - Enact land use controls
 - Appropriate zoning districts
 - Performance standards (design, off-street parking)
 - Establish shared drives
 - Prepare development plan
 - Establish businessmen's association
 - Acquire easements

In addition to developing a procedure, a plan for Route 2, Williamstown, has been put forth, which can be advanced by local officials.

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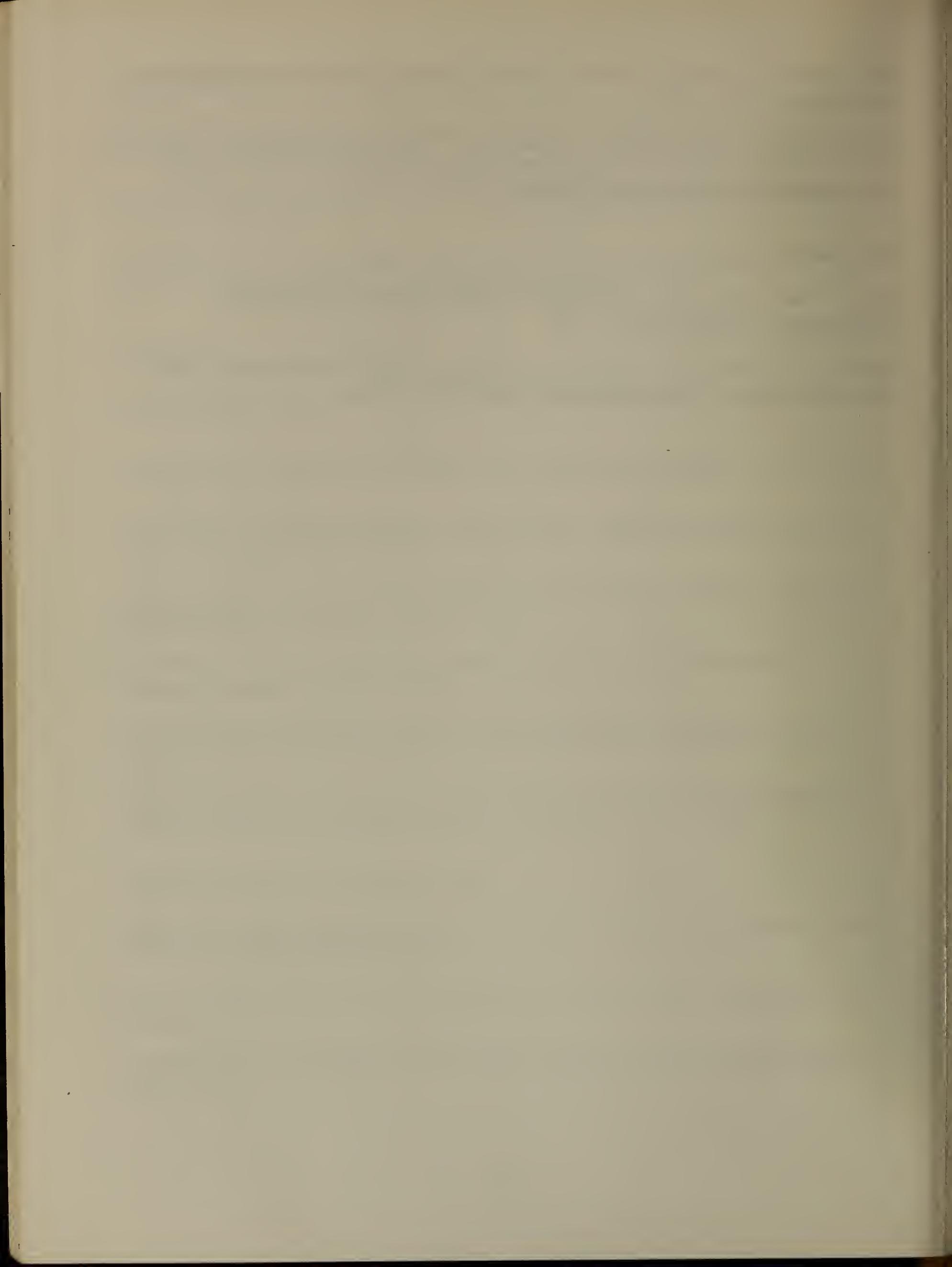
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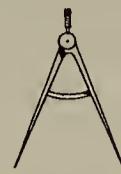
ATTACHMENT A
CORPORATE SURVEY

LETTER TO CORPORATIONS
LIST OF COMPANIES ADDRESSED
SUMMARY OF FRANCHISE STANDARDS



UNIVERSAL ENGINEERING CORPORATION

CONSULTING ENGINEERS



DAVID NASSIF, CHAIRMAN OF THE BOARD
DAVID E. NASSIF, PRESIDENT AND TREASURER
WILLIAM A. HENDERSON, SENIOR VICE PRESIDENT
RICHARD R. MASON, VICE PRESIDENT
DANIEL F. NUGENT, JR., VICE PRESIDENT

100 BOYLSTON STREET • BOSTON • MASSACHUSETTS 02116

AREA CODE 617 542-8216

ATTACHMENT A

Our office is engaged in a study of highway business areas under a contract with the Massachusetts Department of Community Affairs. The purpose of the study is to develop procedures for the cooperation between various levels of government, and between the private and public sectors to improve existing highway business areas. For illustrative purposes direct application is being made to the section of Route 2 in Williamstown between the North Adams line and Water Street. To assist us in this project we would appreciate receiving the following information:

1. Design requirements, if any, which you have developed for your establishments -

Site size	Litter containers
Parking	Facades
Landscaping	Lighting
Signs	

2. Site requirements

Location
Access points
Number of vehicles passing site per day
Zoning

3. Other

If you have a design manual will you please send us a copy, which can be returned upon the completion of this study.

We appreciate your cooperation.

Sincerely,

UNIVERSAL ENGINEERING CORP.

Carol J. Thomas
Planning Director

Frank P. Armstrong, V.P.
Env. & Civic Affairs
American Motors Sales Corp.
1425 Plymouth Rd.
Detroit, Michigan 48227

Amoco Gas Co.
200 E. Randolph Plz.
Chicago, Ill. 60601

M. Marcus Moran. V.P. Dev.
Aubuchon Co.
95 Aubuchon Drive
Westminster, MA 01473

Baskin Robbins Ice Cream Co.
1201 S. Victory Blvd.
Burbank, Cal. 91502

Howard Singer, V.P. Real Estate
Burger King Corp.
7360 No. Kendall Drive
Miami, FLA 33152

E. H. Rydholm, V.P. Civic Affairs
Chrysler Corp.
900 Tower Drive
Troy, Michigan 48084

L. R. Hillwig, V.P. Planning
Cities Service Co.
7th and Boulder
Tulsa, OK 74101

Cumberland Farms Dairy Inc.
777 Dedham St.
Canton, MA 02021

David Segal, V.P. Real Estate
Dunkin Donuts
Pacella Industrial Park
Randolph, MA 02154

Fred Holland, R.E.
First National Stores
5 Middlesex Avenue
Somerville, MA 02143

Theodore Mecke, Jr., V.P. Pub. Rel.
Ford Motors
The American Road
Dearborn, Michigan 48121

David Blair, V.P. Real Estate
Friendly Ice Cream Corp.
1855 Boston Rd.
Wilbraham, MA 01095

Alan D. Ameche, V.P.,
Community Relations
Ginos, Inc.
215 W. Church Rd.
King of Prussia, PA 19406

James M. Hayes, V.P. Real Estate
Grand Union Co.
100 Broadway
Elmwood Park, N. J. 07407

W. I. Walsh, Exec. V.P.
Great Atlantic and Pacific Tea Co
2 Paragon Dr.
Montvale, N. J. 07645

Everett Grossman, V.P. Real Estate
Grossman's
Braintree, MA 02184

Herbert C. Mannery, V.P.
Gulf Oil Corp.
435 7th Avenue
Pittsburgh, PA 15230

L. M. Clymer, Pres.
Holiday Inns, Inc.
3742 Lamar Avenue
Memphis, Tenn. 38118

Howard Johnson
One Howard Johnson Plz.
Boston, MA 02125

Harold Maltz, Exec. V.P.
Lafayette Radio
111 Jericho Tpke.
Syosset, N. Y. 11791

Robert Papp, V.P. Arch. & Const.
McDonalds Corp.
One McDonalds Plaza
Oak Brook, Ill. 60521

N.E. Toyota Dist.
39 Olympia Avenue
Woburn, MA 01801

Pancake House
24 Landy Lane
Cincinnati, Ohio 45215

John Songer, V.P. Prop. Mgt.
Pizza Hut
10255 E. Kellogg
Wichita, Kansas 67202

G. Murphy Young, Pres.
Ryder System, Inc.
3600 No. W. 82nd St.
Miami, FLA 33152

Lennart Lonnegan Dir. Pub. Rel.
Saab-Scania of America Inc.
Saab Drive
Orange, CT 06477

Lewis P. Cohen, VP.
Steak and Brew Inc.
230 Park Avenue
New York, N. Y. 10017

Stop and Shop Companies Inc.
393 D. Street
Boston, MA 02210

Samuel Rose, Chrm.
Subaru of America, Inc.
7040 Central Highway
Pennsauken, N.J. 08110

Texaco Inc.
135 E. 42nd Street
New York, N. Y. 10017

Baron Bates, Pub. Rel. Mgr.
Volkswagon of America Inc.
818 Sylvan Ave.,
Englewood, N. J. 07632

Volvo of America Corp.
Raleigh Industrial Park
Northvale, N. J. 07647

SUMMARY OF FRANCHISE STANDARDS

Location: On major highway
Some - 2 access, specified amount of traffic

Zoning: Commercial

Size: Varies 25,000 square feet to 5 acres

Parking: Ratio Parking Area to Floor Area 3 to 1 to 5 to 1
(Motels 1.25 per guest room)

Signs: Varies - some desire one free standing

Site: Varies - some require concrete steps, walks, lighting, landscaping

Storage: Some require compactors

Sidewalks: Generally 5 feet wide

Driveways: Generally 25 feet wide

Positive attitudes expressed, e.g.

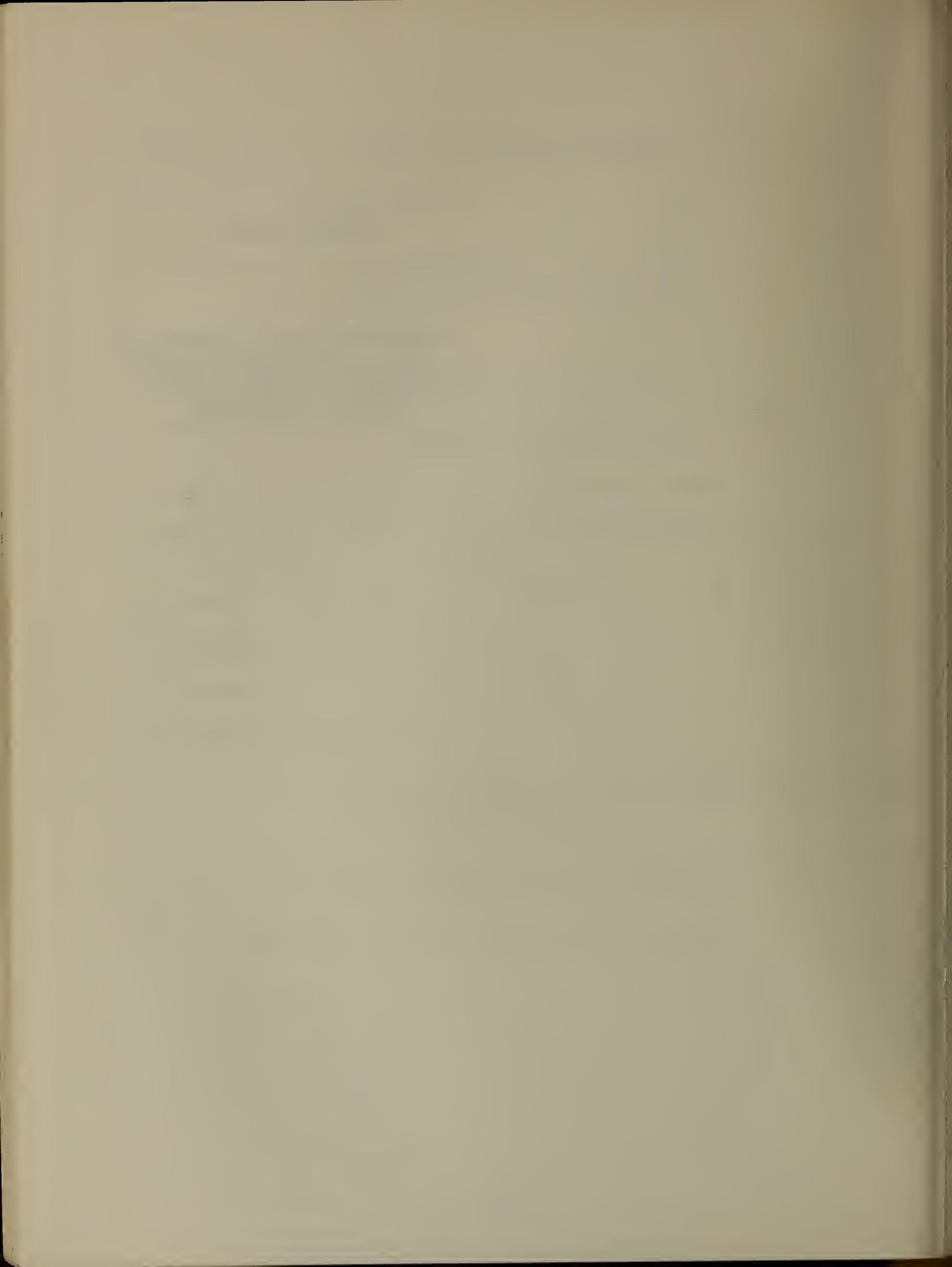
Grand Union "...we've found our success comes from flexible attitudes and structuring our developments to the needs and wants of the community we service".

Holiday Inn - "Allotting an occasional parking space for planting allows the use of larger scale plant material...".

Almost all - "We'll do whatever the Town requires".

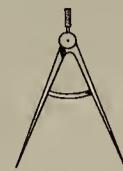
ATTACHMENT B
BUSINESS SURVEY

LETTER TO ROUTE 2 BUSINESSMEN
LIST OF BUSINESSES ADDRESSED
SUMMARY OF RESPONSES FROM
ROUTE 2 BUSINESSMEN



UNIVERSAL ENGINEERING CORPORATION

CONSULTING ENGINEERS



DAVID NASSIF, CHAIRMAN OF THE BOARD
DAVID E. NASSIF, PRESIDENT AND TREASURER
WILLIAM A. HENDERSON, SENIOR VICE PRESIDENT
RICHARD R. MASON, VICE PRESIDENT
DANIEL F. NUGENT, JR., VICE PRESIDENT

100 BOYLSTON STREET • BOSTON • MASSACHUSETTS 02116

AREA CODE 617 542-8216

ATTACHMENT B

Our office is engaged in a study of highway business areas under a contract with the Massachusetts Department of Community Affairs. The purpose of the study is to develop procedures for the cooperation between various levels of government, and between the private and public sectors to improve existing highway business areas. For illustrative purposes direct application is being made to the section of Route 2 in Williamstown between the North Adams line and Water Street.

To complete our research we would like to ascertain the retail trade area serviced by businesses in the study area. Accordingly we would appreciate it if you could provide us with the following estimates:

Percent of your patrons who reside in Williamstown _____

Percent of your patrons who reside in North Adams, Clarksburg or
Southern Vermont _____

Percent of your patrons who are tourists _____

If this percent varies by season, what is your peak tourist season _____

Please insert your estimates on one copy of this letter and return to us in the enclosed envelope. We will release the compilation of results to the "Transcript" in January. We appreciate your cooperation.

Sincerely,

UNIVERSAL ENGINEERING CORP.

Carol J. Thomas
Planning Director

CJT/et

WILLIAMSTOWN, MASS.

A & W Restaurant
State Road

Adam's Auto Co.
State Road

Adam's Nursing Home
Adams Road

Arch'n Ed's Shop & Car Wash
State Road

Brewers' Mobile Station
State Road

British Maid, The
State Road

Brook's Discount Store
Colonial Shopping Center

Carrol's Restaurant
State Road

Chenailes
State Road

Chimney Mirror Motels
Route 2

Colonial Pizza
Colonial Shopping Center

Colonial Village Package Store
State Road

Country Pedler Barn
State Road

Dempsey, Mary Realtor
104 Main Street

Denelli's Service Station
State Road

Dolph's Inferno Restaurant
State Road

Dox Drugs, Inc.
State Road

Four Acres Restaurant
State Road

Fuelon, Inc.
100 Main Street

Grand Union
State Road

J and J Texaco
State Road

Johnson's, Howard
Attn: Mr. Brundage

Karen's Coiffeurs
Grand Union Shopping Center

Kronick's Exxon Station
State Road

Lo Presti's Shoe Store
Colonial Shopping Center

Marge's Gift and Art Shop
State Road

McMahon, Thomas & Son
100 Main Street

Mercury Mobile Home Sales
State Road

Montgomery Ward Catalog Store
State Road

Necklien's Shell Service Station
State Road

Philips, Jon Beauty Salon
Colonial Shopping Center

Redwood Motel
State Road

Sewing Nook
Colonial Shopping Center

State Road Mobile Service
State Road

Village Flower Shop
Colonial Shopping Center

Vogue and Vanity
State Road

Williamstown Savings Bank
171 Main Street

Willows Motel
Route 2

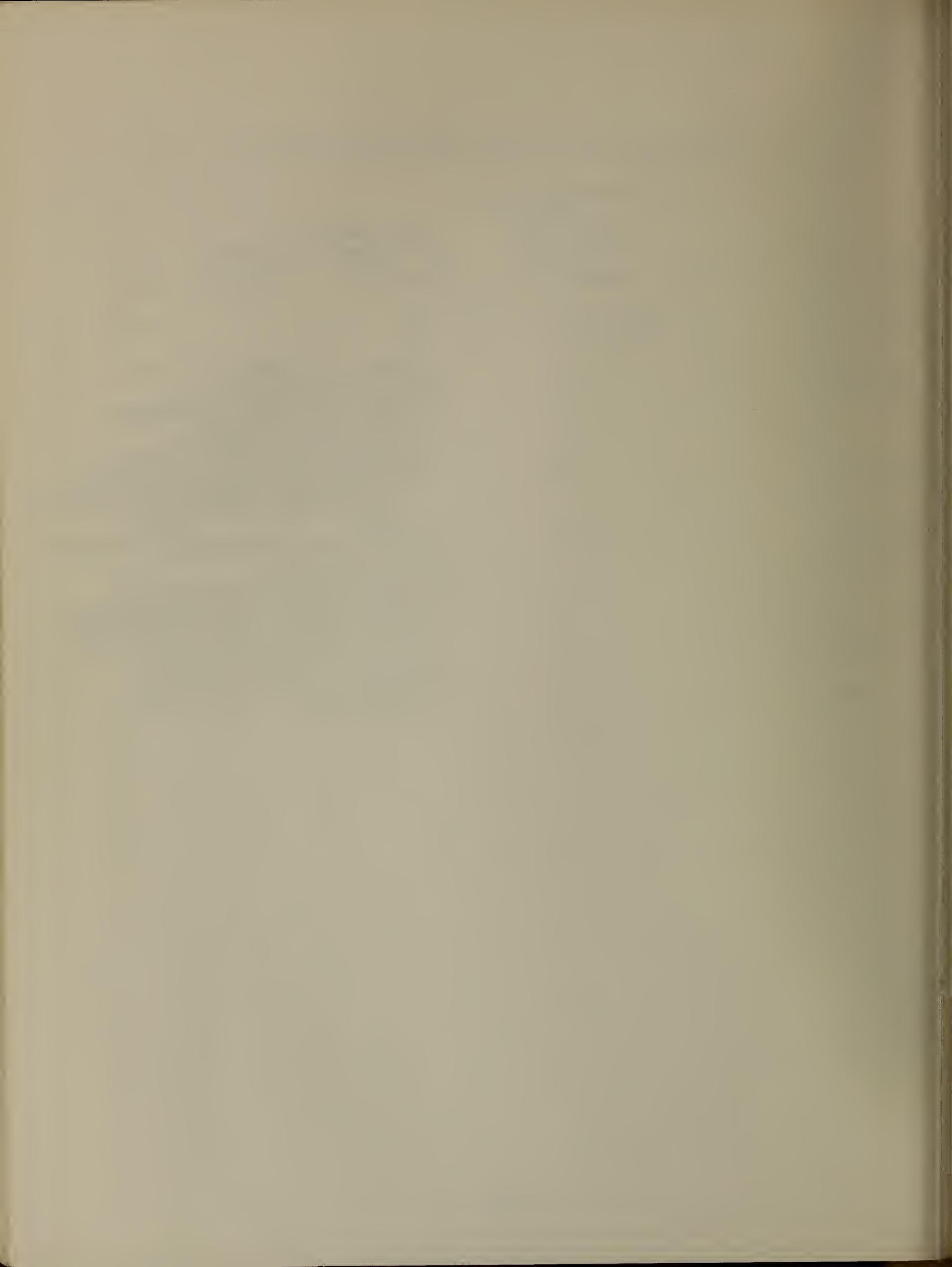
Youthland
Colonial Shopping Center

SUMMARY OF RESPONSES FROM ROUTE 2 BUSINESSES

<u>Type of Business</u>	<u>Percent of Patrons Who</u>			<u>Peak Season</u>
	<u>Reside in</u> <u>Williamstown</u>	<u>Reside in</u> <u>Clarksburg,</u> <u>South Vermont</u>	<u>Are Tourists</u>	
Bank	70 (plus 5 percent - elsewhere)	20	5	July-August
Gasoline Stations	70	15	15	Summer
	70	10	20	June-Oct. 15
Other Automotive				
Car Wash	60	30	10	
Mobile home sales	25	25	50	July-August
Motels	0	0	60	July-August
	2	3	95	July-August and Oct.
Restaurants	50	20	30	July-August
Restaurants - drive in	50	25	25	Summer
Retain sales	40	38	22	Fall

ATTACHMENT C
LOCAL REGULATIONS

ZONING DISTRICTS
DESIGN REQUIREMENTS
ZONING PROVISIONS FOR PARKING
AND LOADING AREAS
REGULATIONS GOVERNING DESIGN,
CONSTRUCTION AND MAINTENANCE
OF OFF-STREET PARKING AND LOADING
AREAS
OTHER BYLAW OR REGULATION REVISIONS
SAMPLE EASEMENT
WILLIAMSTOWN BYLAW REQUIRING
ENVIRONMENTAL IMPACT STATEMENT
SAMPLE ENVIRONMENTAL IMPACT AND
DESIGN REVIEW PROVISION
EASEMENT - EXAMPLE LICENSE
AGREEMENT



ZONING DISTRICTS

Suggested Zoning Amendments

Specific Articles

Article 1. To see if the Town will amend the Zoning Map, dated September 1974, as amended, which is part of the Zoning By-Law of the Town of Williamstown by changing the area shown as the Business District on the north side of Route 2 west of the North Adams line, known as "the Spruces", surrounded by the General Residence District on the east, south and west and by the Hoosac River on the north, from the Business District to the General Residence District.... or take any other action relative thereto.

Article 2. To see if the Town will amend the Zoning Map, dated September 1974 as amended, which is part of the Zoning By-Law of the Town of Williamstown to the Tourist District, the area bounded as follows: by the centerline of Route 2 on the north, by the centerline of Adams Road on the east and south and on the west by lot number 104, as shown on the assessors maps, or take any other action relative thereto.

Article 3. To see if the Town will vote to amend the Zoning By-Law by adding to Section V, a new paragraph to read as follows:

J. PROFESSIONAL OFFICE DISTRICT*

1. Uses Permitted, subject to site plan approval as provided in Section VI F:
 - a. Business or professional offices or banks.
 - b. Parking areas or garages for use of employees, customers, or visitors, subject to design standards in Section VI D.
 - c. Accessory buildings and uses.
 - d. Signs as provided in Section VI E.

....or take any other action relative thereto.

Article 4. To see if the Town will amend the Zoning Map, dated September 1974, as amended, which is part of the Zoning By-Law of the Town of Williamstown by changing from the Districts as shown to the Professional Office District an area bounded as follows: by the centerline of Route 2 on the north, the westerly property line of lot number 77 to a point three hundred and fifty (350) feet from the center line of Route 2, a line parallel to Adams Road and

*Note: Appropriate additions must be made to the dimensional table and references to the new District added as appropriate in the By-Law.

three hundred and fifty feet (350) parallel to the center line thereof to the westerly side of lot 71, by the centerline of Adams Road westerly to the westerly property line of lot 111, northerly by that line to centerline of Route 2 (including lots 104, 109, 111) westerly to the point of beginning.

....or take any other action relative thereto.

Article 5. To see if the Town will vote to amend the Zoning By-Law by adding to Section V. 6 paragraph 2 the following new sub-paragraph c.

c. Gas stations, provided

- 1) they are within five hundred (500) feet of a Business District, and
- 2) at the time the permit is granted there are not more than one such stations in town for every fifteen hundred (1500) persons residing in Williamstown according to the most recent State or Federal census.

so that the district reads as follows:

G. TOURIST BUSINESS DISTRICT

The Tourist Business District is intended to provide goods and services primarily for transients and tourists. Parking as required in Section VI-D must be provided.

1. Uses permitted subject to site plan approval as provided under Section VI-F.
 - a. Hotels, motels and inns.
 - b. Gift shops, antique shops and places for display or sale of handicrafts, provided all displays are within the building.
 - c. Restaurants and places serving food for consumption inside the building.
 - d. Accessory buildings or use.
 - e. Dwelling unit or units located above the first story of a structure which is primarily used for a permitted use in this district, and secondarily used for residence. The minimum floor area for the first dwelling unit shall be seven hundred twenty (720) square feet; each additional dwelling unit shall be at least six hundred (600) square feet.

2. Uses permitted upon approval of the Board of Appeals, as provided in Section VIII, and with site plan approval as provided in Section VI-F. Board of Appeals approval shall be based on satisfaction that the use will not create a nuisance by virtue of noise, odor, smoke, unsightliness, vibration or traffic hazard and that parking is provided as required in Section VI-D.
 - a. Lodging houses or tourist homes.
 - b. Utility structures
 - c. Gas stations, provided
 - 1) they are within five hundred (500) feet of a Business District, and
 - 2) at the time the permit is granted there are not more than one such station in town for every fifteen hundred (1500) persons residing in Williamstown according to the most recent State or Federal census.

....or take any other action relative thereto.

Development District - Alternate I
(Incentives)

Add to Section VI Development of Sites, Location of Buildings a new paragraph VI I to read:

I. Development District

A Development District is an overlay District to the Business, Professional Office, Tourist Business and Limited Industrial Districts. The permitted uses and intensity requirements of the underlying district pertain.

1. In the Development District, the Planning Board may prepare and adopt plans for some or all areas. The plans shall include one or both of the following:

- A. A development plan, which shall show
 1. the location of existing and proposed buildings
 2. the location of existing and proposed drives, walks and parking areas
 3. the maximum traffic expected to be generated by each structure or use.

- B. A design plan, which shall designate the design type and shall show

1. preferred architectural style
 2. uniform style for all items shown to be uniform on Table I, Design Elements
 3. any or all other items contained on Table I, Design Elements.
2. When a site plan showing land within a Development District conforms to the development plan and design plan, if any, the provisions of the applicable Zoning District may be varied as follows:
 1. Maximum height provision contained in Section VI A can be exceeded by fifteen (15) feet.
 2. Maximum coverage provisions contained in Section VI B can be exceeded by ten (10) percent.
 3. Minimum lot size contained in Section VI B can be decreased by ten (10) percent.
3. Submission and approval shall be at the same time, and in the same manner, as for submission and approval under the Environmental Review By-Law of the Town of Williamstown.

Development District - Alternate II
(Prescribed)

Add to Section VI Development of Sites, Location of Buildings a new paragraph VI I to read:

I. Development District

A Development District is an overlay District to the Business, Professional Office, Tourist Business and Limited Industrial Districts. The permitted uses and intensity requirements of the underlying district pertain except as provided in paragraph 2 below.

1. In the Development District, the Planning Board may prepare and adopt plans for some or all areas. The plans shall include one or both of the following:
 - A. A development plan, which shall show
 1. the location of existing and proposed buildings
 2. the location of existing and proposed drives, walks and parking areas
 3. the maximum traffic expected to be generated by each structure or use.
 - B. A design plan, which shall designate the design type and shall show
 1. preferred architectural style
 2. uniform style for all items shown to be uniform on

on Table I, Design Elements

3. any or all other items contained on Table I, Design Elements.
2. When a site plan showing land within a development district is submitted for approval, it shall conform to the Development Plan and Design Plan adopted by the Planning Board limited to the Items on Table I, Design Elements. Other provisions of the Zoning By-Law notwithstanding, the following provisions may be exempted, as follows:
 1. Maximum height provision contained in Section VI A can be exceeded by fifteen (15) feet.
 2. Maximum coverage provisions contained in Section VI B can be exceeded by ten (10) percent.
 3. Minimum lot size contained in Section VI B can be decreased by ten (10) percent.
3. Submission and approval shall be at the same time, and in the same manner, as for submission and approval under the Environmental Review By-Law of the Town of Williamstown.

Note: In a community that does not have an Environmental Review By-Law, one is suggested. As a minimum the contents should include Purpose, Application and Procedure. Two examples are attached, Brookline and Williamstown.

TABLE I
DESIGN GUIDELINES

<u>ITEM</u>	<u>ELEMENTS</u>	<u>CONSIDERATION</u>	<u>WILLIAMSTOWN</u>
GENERAL FORM	Distance between buildings	Placement which minimizes shadowing	Sets of buildings 2 to 3 times maximum allowed
		Clustering to minimize strip	Cluster freestanding buildings
	Focal Point	Kiosk, fountain, landscaping, or similar	Not a fountain (climate)
	Form	Cluster, not linear	Cluster to deemphasize strip
	Linkages	Walkways connecting buildings	Covered walkways
	type	Architectural-shapes	Four foot minimum
	width	Materials (awnings, canopies)	
	Orientation	Placement for wind reduction	Orient to take advantage of view
	sun		
	views		
	activity		
	wind direction		
	Setbacks	Recessed or arranged to provide interest and areas for landscaping	Setback to provide landscape strip in front of and/or between buildings
	Visibility	Mountains, river, business from highway, landscaped area from exterior	Cluster to open mountain and river vistas
			Landscape so businesses are visible from highway
	Scale	Appropriate to adjacent structures	Low rise
SIGNING	shape	Uniform size and shape	Ten and half feet above grade
	height	Utilize sign frame of consistent style	Wood frame
	frame	See illustration	Size - see sign below
	material	See illustration	See illustration
	free standing	See illustration	See illustration
	location	See illustration	See illustration
	direction signage	See illustration	See illustration

<u>ITEM</u>	<u>ELEMENTS</u>	<u>CONSIDERATION</u>	<u>WILLIAMSTOWN</u>
THE SITE	Coverage	See table, page 27	Average twenty percent
	Curb cuts	Minimize number; driveway width and radius of return related to the projected count at the driveway intersection as shown on attached drawing	To be determined based on floor area, projected use and number of employees
	Handicapped ramps	Placement at buildings and parking areas	Placement at buildings and parking areas
	Impervious surfaces (sidewalks, parking areas, walkways)	Bordered by landscaped area Differentiate pedestrian, vehicle Separate pedestrian and bicycle paths	Differentiate materials to define pedestrian, vehicle areas (brick, scored concrete for pedestrians)
	Lighting Plazas	Deflective, uniform style Fixtures in scale with architecture	See illustration
	Screening	Fencing or planting at service areas, loading areas, utility structures, machinery installation	See illustration
	Parking and loading	Size, landscaping, location aisles, etc.	See suggested regulations
	Wiring	Underground	Underground
LAND-SCAPING	Buffer strips	Scaled to landscape and building size	Same
	Ground Cover	Indigenous, minimal maintenance	Same
	Natural Features	Preserve, wherever possible	Same

<u>ITEM</u>	<u>ELEMENTS</u>	<u>CONSIDERATION</u>	<u>WILLIAMSTOWN</u>
LAND-SCAPING	Shrubs and trees	Indigenous, salt resistant	Mountain ash
	Water areas	Retain existing where possible	Retain
	Screening	Placement to screen storage	See Zoning
BUILDING	Awnings or canopies	Uniform line with adjacent buildings	Same
	Color	Compatible or non-disruptive	Same
	Energy	Design and construction conserve energy	Same
	Facade style material	Congruent or compatible	Brick, Timber preferred
	Elevation	Consistent relationship Variety to break strip effect	Maximum thirty-five feet
	Renovations	Maintanance or restoration of original architectural style	
	Roof line	Compatible with adjacent structures Variety to break strip effect	Maximum thirty-five feet
	Roofing material	Light color, appropriate to architectural style	Light color to reduce heat loss
	Texture	Appropriate to architectural style	Same
	Windows	Appropriate to architectural style	Same

<u>ITEMS</u>	<u>ELEMENTS</u>	<u>CONSIDERATION</u>	<u>WILLIAMSTOWN</u>
STREET FURNITURE	Benches shape material placement	Uniform style	Same
	Bike racks type material placement	Uniform style	Same
	Fences panel size material height	Uniform style	Six feet Redwood Three and half feet above grade
	Litter cans shape material base style	Uniform style	Rectangular Redwood with insert Round
	Street Lights globe shape height material frequency	Uniform style, light deflected downward	Flat Twenty feet Western red cedar
	Traffic signals height	Visible, but with unobtrusive standards	Twenty feet Nineteen feet above grade
	material		Redwood
	Utility poles and meters material shape height	Preferably at rear of buildings	None
	Parking meters - rarely on a strip	None	None
	Bus shelter size material style	Dependent on usage Dependent on predominant architecture	Six feet Glass, redwood frame Rustic
	Kiosk	Consistent with other street furniture	Tourist information

DESIGN REQUIREMENTS

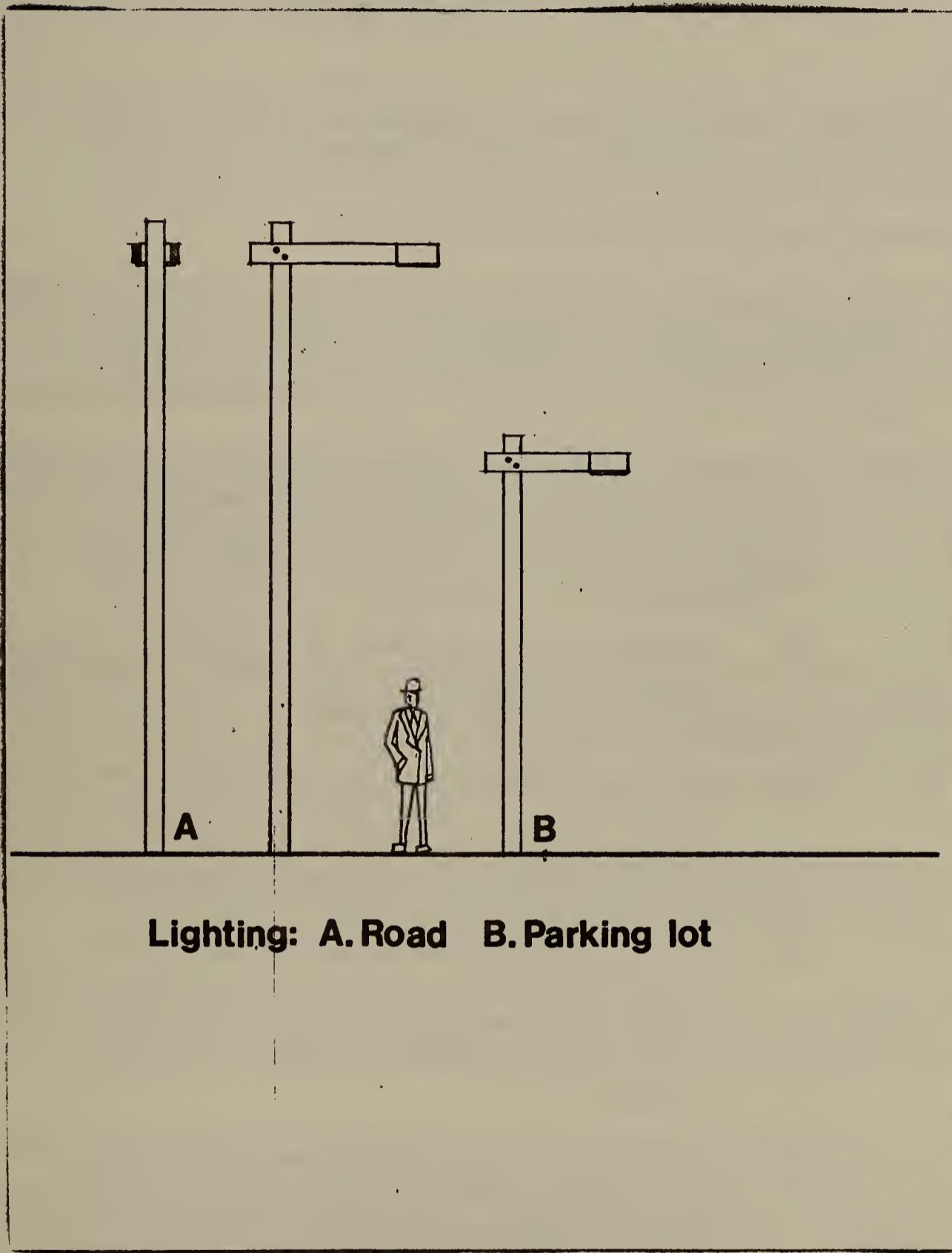
Applicability of Design Standards

1. To Tourist Business Districts
2. To portions of Business Districts designated Highway Improvement Areas and shown on a development plan adopted by the Planning Board. There may be more than one such area and standards may vary from area to area, as appropriate.

Contents of Design Standards

1. Street lights
2. Traffic light standards
3. Signs
4. Benches
5. Litter cans
6. Pavement surface
7. Fencing
8. Land cover
9. Trees and shrubs
10. Façade treatment
11. Roof lines
12. View lines
13. Bicycle racks

Standards can be incorporated as each area is defined. Standards should build on the guidelines presented for the area included in this study.



Lighting: A. Road B. Parking lot

ZONING PROVISIONS
FOR
PARKING AND LOADING AREAS

Article:

To see if the Town of Williamstown will amend the Protective Zoning bylaw by changing Article VI. paragraph D to read as follows:

D Off-Street Parking and Loading Requirements

- a. In all districts, there shall be provided at such time any building or structure is erected or increased in capacity, or any use of a structure or land is established or changed, off-street parking spaces and loading areas for vehicles in accordance with the following requirements.
 - (1) No land shall be used, nor shall the use of any land be changed and no building or structure shall be erected, enlarged, replaced or used, nor its use changed, unless the off-street parking and loading bay requirements specified in this section are provided.
 - (i) Any area once designated as required off-street parking shall not be changed to any other use unless and until equal facilities are provided.
 - (ii) Off-street parking existing at the effective date of these regulations in connection with the operation of an existing building or use shall not be reduced to an amount less than hereinafter required for a similar new building or use.
 - (iii) The required off-street parking shall be for occupants, employees, visitors, and patrons and shall be limited in use to motor vehicles and bicycles. The storage of merchandise, motor vehicles for sale, or the repair of vehicles is prohibited.
 - (iv) In addition to all other space requirements every company car, truck, tractor, trailer or other vehicle normally stored at any site shall be provided with off-street parking space in an area reserved for no other use.

- b. For the purposes of this Section, terms are defined as follows:

- (1) an exterior parking space is an area having a width of not less than nine (9) feet and a length of not less than twenty (20) feet, exclusive of traffic lanes and maneuvering space. An interior

parking space is an area having a width of not less than nine (9) feet and a length of not less than twenty (20) feet exclusive of lanes and maneuvering space.

- (ii) a loading or unloading bay is an area of not less than twelve (12) feet in width and fifty (50) feet in length, exclusive of traffic lanes and maneuvering space. Loading bays shall be located at the sides or rear of the building with direct access to the building to be served.
- (iii) a driveway is a single access to and from a public way with separate entrance and exit lanes, except in the case of single family dwellings a driveway need not have separate entrance and exit lanes.
- (iv) gross floor area is the total floor area designated for occupancy and use, including basement and other storage areas, provided however that stairways, elevator wells, restrooms and lounge areas, common hallways and building service areas shall not be included in the computation of such floor area.

c. Design, construction and maintenance of off-street parking and loading areas shall be in accord with the Regulations of the Town of Williams-town Governing the Design, Construction and Maintenance of off-Street Parking and Loading Areas, adopted by the Planning Board, dated _____
_____.

- (1) Where the computation of the off-street parking or loading bay space requirements results in a fractional number, the fraction shall be counted as one (1).
- (2) Where one (1) building is used for more than one (1) use, off-street parking space requirements shall be computed for each use.
- (3) When land in a Business or Tourist Business District is shown on a plan submitted in accord with the next paragraph, the Planning Board may allow reductions in required spaces as follows:

Up to thirty percent for shared parking areas
Up to five percent for bicycle racks placed as
approved by the Board

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 - (1) No land shall be used, nor shall the use of any land be changed and no building or structure shall be erected, enlarged, replaced or used, nor its use changed, unless the off-street parking and loading bay requirements specified in this section are provided.
 - (i) Any area once designated as required off-street parking shall not be changed to any other use unless and until equal facilities are provided.
 - (ii) Off-street parking existing at the effective date of these regulations in connection with the operation of an existing building or use shall not be reduced to an amount less than hereinafter required for a similar new building or use.
 - (iii) The required off-street parking shall be for occupants, employees, visitors, and patrons and shall be limited in use to motor vehicles and bicycles. The storage of merchandise, motor vehicles for sale, or the repair of vehicles is prohibited.
 - (iv) In addition to all other space requirements every company car, truck, tractor, trailer or other vehicle normally stored at any site shall be provided with off-street parking space in an area reserved for no other use.

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- (iii) a driveway is a single access to and from a public way with separate entrance and exit lanes, except in the case of single family dwellings a driveway need not have separate entrance and exit lanes.
- (iv) gross floor area is the total floor area designated for occupancy and use, including basement and other storage areas, provided however that stairways, elevator wells, restrooms and lounge areas, common hallways and building service areas shall not be included in the computation of such floor area.

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- (1) Where the computation of the off-street parking or loading bay space requirements results in a fractional number, the fraction shall be counted as one (1).
- (2) Where one (1) building is used for more than one (1) use, off-street parking space requirements shall be computed for each use.
- (3) When land in a Business or Tourist Business District is shown on a plan submitted in accord with the next paragraph, the Planning Board may allow reductions in required spaces as follows:

Up to thirty percent for shared parking areas
Up to five percent for bicycle racks placed as
approved by the Board

d. A plan or plans, which if applicable, may be incorporated in a site plan submittal, showing, as applicable, the location of buildings existing and to be erected, of off-street parking and loading bay spaces including traffic lanes and maneuvering spaces, of driveways, or signs and of lighting facilities and the methods of drainage of surface water from all paved areas, shall be submitted to the Planning Board or its representative for prior approval sixty (60) days before any application for a permit shall be made or any change of use commenced.

The plan shall be drawn at a scale of one inch (1") equals forty feet (40') or larger and stamped by a registered professional engineer or registered professional architect.

e. A minimum number of spaces in accord with the following table:

Table of Minimum Parking Spaces Required

<u>Uses</u>	<u>Parking Spaces Required</u>
Accessory uses permitted if there are employees and professional offices and home occupations in a residence district,	Three (3) spaces plus three (3) spaces for each non-resident employee.
Business and professional offices; banks and saving institutions	One (1) space for each two hundred seventy (270) square feet of gross floor area, plus one (1) space for every two (2) employees.
Barber Shops and Beauty Parlors	Two (2) per barber or three (3) per beautician based on the design capacity of the structure or one (1) space for every two hundred (200) square feet of gross floor area whichever is greater.
Bowling Alleys	Five (5) per alley.
Garages and gasoline stations with repair service	One (1) space for each one thousand (1000) square feet used for repairing vehicles plus two (2) spaces for each pump, and two (2) spaces for each lubrication pit or service bay.

Gasoline service station	One (1) parking space for each employee, plus two (2) for each service bay and one (1) for each pump.
Hospitals, nursing homes, convalescent homes, rest homes and extended care facilities	One (1) space for each two (2) beds plus one (1) space for every (3) employees or staff members.
Hotels and motels	Three (3) spaces for each two (2) rental units, plus three (3) spaces for each two hundred (200) square feet of floor area available for meetings or functions and one (1) space for every four (4) employees.
Membership clubs	One (1) space for every ten (10) members, except in the case of golf clubs the requirement for recreation areas shall govern.
Mortuaries and funeral homes	Five (5) spaces per parlor or chapel unit, or one (1) per four (4) seats, whichever is greater.
Multi-dwelling units	Two (2) spaces per dwelling unit, plus one (1) additional space for each bedroom over two (2) per dwelling unit, to a maximum of three (3) spaces per dwelling unit.
One family dwellings	Two (2) spaces, plus one (1) additional space for each bedroom over two (2).
Places of assembly or of amusement	One (1) space for every two (2) seats, plus one (1) space for every three (3) employees, except that in the case of fast food service places (or portions of the structure used for this purpose) there shall be spaces as listed for Restaurants, as listed below.
(See also recreation areas)	

Restaurants, cafeterias, taverns, lounges and similar uses for serving food and beverages;	Parking space per one thousand (1000) square feet of gross floor area:
Sit down - Food or beverages consumed inside building	Fifteen (15)
Carry Out - No food or beverages consumed on premises	Twenty (20)
Combination sitdown and carry-out	Parking requirements shall be in direct ratio to the gross floor area designated for seating.
Recreation areas	One (1) space for every hole of golf course, every picnic table or outdoor fireplace.
Retail stores, service establishments:	
(a) under three thousand (3000) square feet	One (1) space for each two hundred seventy (270) square feet of gross floor area.
(b) over three thousand (3000) square feet	One (1) space for each one hundred eighty (180) square feet of gross floor area.
Schools, public, private or parochial, nursery or pre-school, elementary, middle or junior high	Two (2) spaces per three (3) teachers and employees normally engaged in or about the building or grounds, plus one (1) space for each one hundred fifty (150) square feet of seating area, including aisles, in any auditorium.
Schools, private and parochial, senior high schools, other public schools, professional schools, colleges or other places of instruction	Two (2) spaces per three (3) teachers and employees normally engaged in or about the building or grounds, plus one (1) space per five (5) students, or one (1) space for each one hundred and fifty (150) square feet of seating area, including aisles, in any auditorium, gymnasium or cafeteria intended to be used as an auditorium, whichever is greater.

Swimming pools, public

One (1) per thirty (30) square feet of water area.

Uses permitted in the Limited Industrial District, not specifically provided for hereinabove

One (1) space per employee plus one (1) space for each two thousand (2000) square feet for the first twenty thousand (20,000) square feet and one (1) space for each additional ten thousand (10,000) square feet.

For any use not specifically covered by the list above, the required number of spaces shall be determined by the Board of Selectmen at the time of site plan approval and shall provide adequate parking consistent with similar uses as described above.

- f. When approved by the Planning Board on a site plan submitted in accord with Paragraph d. of this section, the required number of spaces can be reduced by five (5) percent, provided that three (3) times as many bicycles can be accommodated in approved racks than vehicles would have been accommodated in reduced number of spaces.
- g. In all Districts, in addition to off-street parking requirements, and on the same premises with every building, structure, or part thereof, erected and occupied for manufacturing, storage, warehouse goods, display, a department store, a wholesale store, a market, a hotel, a hospital, or other uses similarly involving the receipt or distribution of vehicles, materials or merchandise, there shall be provided and maintained on the lot adequate space for standing, loading, and unloading services adjacent to the building opening used for loading and unloading in order to avoid undue interference with public use of the streets or alleys.

Off-street loading and unloading space shall be provided as follows:

- (i) One (1) off-street loading and unloading bay shall be provided for buildings up to and including twenty thousand (20,000) square feet of floor area, plus one additional off-street loading and unloading bay for each additional twenty thousand (20,000) square feet of floor area up to and including one hundred thousand (100,000) square feet.
- (ii) There shall be provided an additional off-street loading and unloading bay for each additional forty thousand (40,000) square feet of floor area in excess of one hundred thousand (100,000) square feet.

- (iii) Where trailer trucks are involved such loading and unloading, bay shall be an area twelve (12) feet by forty-five (45) feet with a fourteen (14) foot height clearance and shall be designed with appropriate means of truck access to a street or alley as well as adequate maneuvering area.
- (iv) All areas devoted to permanent off-street loading and unloading as required under this section shall be of a sealed-surface construction and maintained in such a manner that no dust will result from continuous use.

REGULATIONS OF THE TOWN OF WILLIAMSTOWN GOVERNING THE DESIGN,
CONSTRUCTION AND MAINTENANCE OF OFF-STREET PARKING
AND LOADING AREAS

Purpose:

The intent of these regulations is to assure safe, well designed, attractive and well maintained parking and storage areas.

1. General

Areas to which regulations apply. The following standards apply to all off-street parking and loading spaces as required in Section VI. paragraph D of the Zoning Bylaw of the Town of Williamstown, except for off-street parking spaces for one family dwellings.

Intent. All required off-street parking and loading bay spaces, including traffic lanes and maneuvering space therefor, as well as driveways, shall be paved and shall be cleaned, plowed and maintained in good condition at all times by the owner or occupant thereof as the responsibility between them shall have been determined. The owner shall have ultimate responsibility for compliance. Except in the Retail Business District and in the Tourist Business District all required off-street parking and loading bay spaces shall be located entirely on the same lot as and in all cases shall be within a reasonable distance of the principal use they are designated to serve.

2. Design Requirements

a. Setback

There shall be no parking spaces nor space for loading bays, except for driveways, within the first ten (10) feet of the applicable front yard setback requirement. In the Industrial District there shall be no off-street parking spaces nor space for loading bays within the side yard or rear yard setback requirements except as to any such side and rear yard which is adjacent to similarly zoned land, where a single common driveway serves both parcels of similarly zoned land.

b. Coverage

No more than seventy-five (75) percent of the developed lot area not covered by building shall be devoted to parking and loading spaces. The balance shall be devoted to driveways, islands and landscaped areas.

c. Landscaping

The first ten (10) feet in each yard depth shall be maintained open, except for driveways, with grass, bushes, flowers or trees indigenous to the area, and in the case the boundary abuts property being used for residential purposes or in a residential district, a fence to provide suitable screening between properties shall be erected in such area in addition to appropriate landscaping. A minimum of ten (10) percent of the total area of the lot area not covered by buildings shall be landscaped. A minimum of ten (10) feet adjacent to all structures except for areas used for sidewalks, loading and unloading bays and entrances to underground parking shall be appropriately landscaped.

d. Screening

In addition to the screening required in paragraph c. above, all loading bays and aprons shall be screened from view from abutting properties.

e. Driveways and/or Service Roads

Interior driveways and/or service roads shall have minimum widths as follows:

One-way traffic - fifteen (15) feet

Two-way traffic - thirty (30) feet

Minimum turning radius shall be twenty (20) feet

The profile gradient of driveways or service roads shall be no steeper than 3% for a distance of at least 50 feet from the nearest edge of an intersecting roadway or drive.

f. Parking Aisle Width

Aisles shall be provided as follows:

<u>Angle of parking</u>	<u>Number of Tiers</u>	<u>Aisle Width</u>	
		<u>Two-way traffic</u>	<u>One-way Traffic</u>
Parallel to curb	One each side of aisle	24 feet	24 feet
90 degrees	One each side of aisle	24 feet	24 feet
60 degrees	One each side of aisle	24 feet	18 feet
45 degrees	One each side of aisle	24 feet	16 feet
30 degrees	One each side of aisle	24 feet	15 feet

In the case of herringbone parking the aisle size may be reduced by three (3) feet.

g. Bay Alignment

In no case shall parking bays be aligned at an angle of less than thirty (30) degrees to the aisle except for parallel parking.

h. Designated parking areas

No more than twenty (20) spaces shall be provided in a row without separation by an interior driveway, and by a landscaped area providing that in the case of double rows, this section shall mean twenty (20) spaces on each side of the bay area.

i. Sidewalks or crossings

Paved sidewalks, painted pedestrian crossings and painted pedestrian aisles shall be provided for pedestrian safety and convenience as approved by the Planning Board.

j. Lighting

Lighting facilities shall be provided as approved by the Board of Selectmen as to style, intensity and location and shall be so arranged that they neither:

1. Unreasonably distract occupants of adjacent properties.
2. Glare onto public ways or adjacent properties.

k. Entrances and Exits (see also paragraph e. above)

Entrances and exits to parking lots shall be for one-way traffic, unless divided by a suitable landscaped median strip. Driveway entrances shall be at least twenty (20) feet from the intersection of any street and in the case of parking lots in excess of one hundred (100) vehicle capacity they shall not be closer than two hundred (200) feet from a street intersection, unless otherwise approved by the Planning Board. Each such entrance and exit shall have a minimum lane width of twelve (12) feet. The location of all intersections, with public ways, and the design shall be approved by the Police Chief.

l. Apron size

For all loading areas, there shall be an apron of sixty (60) feet, which added to the bay requires a minimum dock approach area of one hundred and twenty (120) feet from the interior driveway or service road.

m. Direction markers, signs and space designation

All spaces shall be delineated by painted pavement markings. Each intersection of an aisle and interior driveway shall be marked by traffic flow direction signs or by pavement marking flow direction arrows. Each intersection of an interior driveway and a public street shall be marked by a stop sign and traffic flow direction signs.

n. Snow storage

An area shall be designated on the plan to be off the parking lot surface for snow storage, equal in amount to at least five (5) percent of the gross parking lot area. The area will be located where the storage of snow will not interfere with the flow of traffic, the line of vision or the preservation of landscaping.

o. Utilities

All utility lines shall be installed underground.

p. Decked or garage parking and decked or interior loading areas

These areas shall be subject to the approval of the Building Inspector.

3. Construction Requirements

a. Pavement

Parking lots, loading areas, drives and sidewalks shall conform with the relevant requirements for street and sidewalk construction under the current Rules and Regulations Governing Subdivision of Land of the Williamstown Planning Board.

b. Drainage

Grading shall be such that no drainage flows from parking areas across public walks, public ways, or onto abutting property without the consent of the abuttor. Paved areas larger than ten thousand (10,000) square feet in area shall be provided with a closed drainage system with at least one catch basin provided for each twenty thousand (20,000) square feet of drainage area or fraction thereof. Drainage systems shall extend to an existing water course or may connect to a town drainage system with the approval of the Board of Selectmen. Each catch basin shall have at least a three (3) foot sump and shall be connected to a drainage manhole. Minimum drainage pipe size

shall be ten (10) inches diameter. Trunk drains shall be adequate in capacity to carry the flow of a ten (10) year storm frequency (rational method) when flowing full. Drainage flow calculations with backup data prepared by a registered professional engineer shall be provided to the Board upon their request. Finished grade elevations shall be shown on the parking lot plan for at least the following:

Pavement low points and high points, pipe inverts, rim grades of drainage structures, ditch inverts, existing invert and water level in existing water courses, abutting existing traveled ways and sidewalks, existing and proposed building entrances.

c. Curbing, wheelstops, and islands

Curbing or wheel stops a minimum of six (6) inches high and maximum of nine (9) inches high shall be provided at all locations where parking spaces abut lawn or landscaped areas and pedestrian areas including aisles and sidewalks.

d. Pavement slopes and grading

Pavements shall be graded to avoid sheet flow of snow melt and rain water. Low points shall be kept at a minimum number and shall be provided with at least one catch basin or other approved outlet. Pavement slopes shall be shown on plan or profiles. The following maximum and minimum slopes shall apply:

<u>Area</u>	<u>Maximum</u>	<u>Minimum</u>
Parking Lot Surface	4 %	1.0 %
Access Drive		
Profile	10 %	1.0 %
Cross Slope	3/4"/ft.	3/4"/ft.
Pedestrian Walks		
Profile	10 %	level
Cross Slope	3/4"/ft.	3/8"/ft.

4. Maintenance

All off-street parking and loading areas shall be plowed and suitably sanded at all times when weather conditions warrant same before they are available to the public for use.

Landscaping, pavement, signs and other improvements shall be maintained by the owner. This maintenance includes but is not limited to painting, mowing, weeding, trimming and in the case of pavement and curbing to pitching and reconditioning as needed.

5. Administration

These regulations shall be enforced in the same manner as the Zoning Bylaw with the same procedure for appeal.

6. Variation

The Planning Board may vary the above parking regulations to accommodate areas clearly marked and designated for use by compact cars only, and the loading regulations for areas similarly designated for pick-up trucks only.

OTHER BYLAW OR REGULATION REVISIONS

Sign By-Law

Add to Section 3, c Business, Tourist Business, Limited Business and Industrial Districts a paragraph 8 to read:

8. Except that notwithstanding any other provisions of this bylaw signs must conform to standards adopted by the Selectmen for Highway Improvement areas or by the Planning Board at the time of adoption of a design plan, as provided in the Zoning Bylaw.

(or similiar wording developed at the time the standards or plan are adopted)

Note, the Professional Office District must be incorporated into the bylaw.

By-law Requiring Environmental Impact Statements

Add to applicability the following:

4. for development in a Business, Tourist Business or Professional Office District on land shown on a design and/or development plan adopted by the Planning Board.

Add to the Aesthetics Element, paragraph h 1 -

In a Business Tourist Business, or Professional Office District special attention shall be given to the compatibility of facades (or similiar wording).

WILLIAMSTOWN BY-LAW REQUIRING ENVIRONMENTAL IMPACT STATEMENTS

Article 35. To see if the Town of Williamstown will vote to adopt the following By-Law, entitled "By-Law Requiring Environmental Impact Statements."

I. PURPOSE

The purpose of this By-Law is to provide for the review of plans of certain structures or developments which, by virtue of their design, type of construction, location and/or appearance may have a significant impact on the environment, character, property values, traffic patterns or utilities of the Town, thereby potentially affecting public health, public safety or the general welfare.

II. APPLICABILITY

An environmental impact statement shall be filed with the Planning Board for the purpose of assuring that adequate consideration is given to potential environmental impact on the following:

1. for any definitive plan for the subdivision of land into five (5) or more lots for single family residential construction,
2. for any site plan for the construction of multi-family dwellings containing a total of five (5) or more dwelling units,
3. for any site plan for a research & development facility, any site plan for new industrial establishments employing more than ten (10) persons, for any site plan for a commercial earth removal operation, and for any site plan for a hotel, inn, motel, tourist home, or lodging house of 50 or more rooms.

Said environmental impact statement shall be filed simultaneously with the filing of a site plan or definitive plan in the office of the Town Clerk.

III. APPROACH

An environmental impact statement shall clearly and methodically assess the relationship of the implementation of the proposed development to the natural and man-made environment of the Town. The statement shall utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in the planning and designing of the proposed project.

It is intended that the statement be a guide to the Planning Board in its judgment and deliberation regarding the proposed development and its compatibility with existing conditions and the planning of the Town. Failure of the plans or of the impact statement for the proposed development to indicate such compatibility may be grounds for re-examination and/or the re-submission thereof at the determination of the Planning Board.

IV. CONTENTS

Each environmental impact statement submitted in accordance with this By-Law shall consist of four (4) separate sections, each section to address one of the following concerns:

The environmental impact of the proposed development.

Any adverse environmental impacts which cannot be avoided should the proposed development be implemented.

Alternatives to the proposed development which accomplish the same purpose and which are expressly allowed, or allowed by permit, by the Zoning By-Law. A summary of the impacts of these alternatives.

All measures available, and those to be used, to minimize adverse environmental impacts (or maximize beneficial impacts).

The section on environmental impacts shall consist of the elements and sub-elements required by the following table, except as waived by the Planning Board. These elements shall consist of the following:

ENVIRONMENTAL IMPACT STATEMENT ELEMENTS

RESIDENTIAL SUBDIVISIONS			SITE PLANS		
Element	for more than 4 but less than 20 lots for single family dwellings (1).	For 20 or more lots for single family dwellings	For multi (2). family construction of 5-12 dwelling units (3).	For multi family construction of more than 12 dwelling units	For Research & Development Fac. or New Industry Estab. w/10 or more employees or earth removal operation or hotels, inns, motels, tourist homes, lodging house with 50 or more rooms.
Physical	Sub-elements 3 and 4 required	ALL	Sub-Elements 3 and 4 required	ALL	ALL
Transportation	Sub-element 1 & 2 required		Sub-element 1 & 2 required		
Public Utility	Sub-elements 1, 2 & 3 required	ELEMENTS	Required	ELEMENTS	ELEMENTS
Neighborhood & Community	Sub-elements 1 & 3 required		Sub-elements 1, 3 & 5 required		
Socio-Economic	Sub-element 2 required	ARE	Sub-element 2 required	ARE	ARE
Aesthetic	Required		Required		
Master Plans	Required	REQUIRED	Required	REQUIRED	REQUIRED
Benefit/Cost	Required		Required		

Note: See text for details pertinent for each character of subdivision, or site plan.

1. Single family dwelling: a structure containing no more than one (1) dwelling unit.
2. Multi family dwelling: a structure containing more than one (1) dwelling unit including single family attached units.
3. Dwelling unit: one (1) or more rooms arranged for the use of one (1) or more individuals living together as a single housekeeping unit, with cooking, living, sanitary, and sleeping facilities.

A. A PHYSICAL ELEMENT to consist of the following sub-elements:

1. Air pollution — Changes in local air quality caused by the proposed development shall be predicted. Sources shall be identified, and consideration shall be given to changes in air quality both during construction and after completion of the project. Except in large residential developments (one hundred (100) dwelling units or more) or in high density multi-family developments (six (6) or more dwelling units per acre of lot area) and in non-residential subdivisions (i.e., subdivisions of land owned for business, commercial and/or industrial purposes), air pollution impacts may be identified and expressed in relative terms. For these large and/or high density residential developments and for non-residential developments, the Planning Board may require a detailed, technical report to be prepared. This sub-element shall consider not only impacts caused by the proposed development and its alternatives, but also impacts on it by adjacent existing or proposed developments.
2. Noise Pollution—the same requirements for air pollution sub-element shall govern.
3. Surface and Sub-surface Water Pollution—Impact of storm water run-off on adjacent and downstream surface water bodies and sub-surface ground water and the water table shall be detailed. Coordination with State and Town water quality agencies including the Board of Health and Conservation Commission is recommended so that necessary agreements and responsibilities can be included in the study of the proposed development and its alternatives. The relationship of the proposed development to flood plains and municipal water supply impoundments and reservoirs shall be shown.
4. Soils—The potential dangers of erosion and sedimentation caused by both the construction, operation and maintenance of the proposed development and its alternatives shall be detailed and may also be related to sub-element (3) above. It shall also deal with the compatibility of existing soils with the proposed development.

5. **General Ecology**—the relation of the proposed development to the major botanical, zoological, geological and hydrological resources of the site shall be examined. Consideration of these resources adjacent to the site shall also be made where deemed appropriate by the Planning Board. Consideration shall also be given to rare or endangered species of plant and wildlife found on the site.

B. A TRANSPORTATION ELEMENT to consist of the following sub-elements:

1. **Traffic Generation**—Existing traffic volume, composition, peak hour levels and street capacities shall be shown. Overall average daily traffic generation, composition, peak hour levels, and directional flows shall be estimated. The methodology used to derive these predictions shall be included.
2. **Street Maintenance**—Methods, responsibility, and projected cost to the Town shall be detailed. Coordination with the Highway Department is recommended.
3. **Public Transportation**—Consideration shall be given to the relation of the proposed development to existing public transportation and how the proposed development may be served.
4. **Pedestrian Movement**—Consideration shall be given to the movement of pedestrians within the proposed development and between the proposed development and existing or other planned development. Included shall be consideration of various means of pedestrian movement, such as bikeways, sidewalks, and pathways.

C. A PUBLIC UTILITY ELEMENT prepared by a Professional Engineer registered in Massachusetts, to consist of the following sub-elements:

1. **Water Supply and Distribution**—The average daily and peak demand; method to supply the buildings on the site including sizes of mains, existing and proposed; and the cost and the proposed responsibility for bearing or sharing the cost shall be detailed. Coordination with the Water Department is strongly recommended so that necessary agreements and responsibilities can be included in the study of the proposed development and its alternatives.
2. **Sewage Treatment**—The average daily and peak demand; and any unusual composition or concentration of component flows into the public system, the method to serve the buildings on the site including size of pipe, existing and proposed, the cost and proposed responsibility for bearing or sharing the cost shall be detailed. Coordination with the Sewer Department and the Board of Health is strongly recommended for the reasons in (1) above.
3. **Storm Drainage**—The same requirements for the water supply and distribution sub-element shall govern.
4. **Solid Waste**—The average weekly demand of cubic yards in the land fill expected; contents, recycling potential, and method of on-site storage.
5. **Recycling**—Consideration shall be given to the recycling of paper, glass, metals and other waste materials and to the provision of receptacles or other actions intended to encourage or facilitate recycling.

D. A NEIGHBORHOOD AND COMMUNITY ELEMENT to consist of the following sub-elements.

1. **Schools**—The expected impact on the school system pre-primary, primary and secondary levels, by type of housing, (single-family, garden apartment, townhouse, high rise, etc.), and by bedroom (one-bedroom, two-bedroom, etc.). The number of students; school bus routing changes if found necessary; and impact if any on private systems. Coordination with the School Department is recommended, particularly for large residential developments.
2. **Police**—The expected impact on police service, time and manpower needed to protect the proposed development; provision for special alarm or warning devices or agents and other needs shall be presented. Coordination with the Police Department is recommended.
3. **Fire**—Expected fire protection needs; on-site fire fighting capabilities; on-site alarm or other warning devices; fire-flow water needs, source and delivery system and other needs shall be presented. Coordination with the Fire District is recommended.
4. **Recreation**—On-site recreation provisions shall be detailed and off-site recreation demands shall be estimated. Provision for public open space, either dedicated to the Town or available to its residents, shall be described. Open space available primarily or exclusively for residents or employees shall also be described. Coordination with the Recreation Committee is recommended.

5. Existing Neighborhood Land Use—Compatibility with adjacent or nearby existing land uses, or with firm private development plans, if known, for adjacent or nearby land use changes to occur during the life of the proposed development. Consultation with the Planning Board is strongly recommended.

E. A SOCIO ECONOMIC ELEMENT to consist of the following sub-elements:

1. Population—In residential developments, the overall population; ranges in expected family size by housing type and bedroom count; ranges in expected income and other relevant social data shall be estimated.
2. Low/Moderate Income Housing—In residential developments, provisions for low and/or moderate income housing shall be identified as to type of housing and bedroom count; State or Federal subsidies proposed to be applied; and indication if any from the appropriate agencies as to its desirability and feasibility for its location, financing and operating subsidy.
3. Employment—In all non-residential developments and in large residential developments the number and types of job skills to be employed shall be detailed. This shall include both construction labor and full-time work force when the development is in operation; employment by shift; estimates as to the amount of local labor which is intended to be used; and minority-group labor opportunities. Coordination with the Berkshire County Regional Planning Commission is recommended for industrial and commercial development.

F. AN AESTHETICS ELEMENT to consist of the following sub-elements:

1. Architecture—The type or style of architecture shall be described to the extent that the structures are part of the site plan approval. While these *Regulations* are not intended to inhibit or discourage creativity, invention or innovation, and no particular architectural style shall be imposed by these standards, the relation of the proposed development to prevailing types of architecture for similar buildings, and its compatibility with the function of the building and to the architecture of adjacent buildings shall be considered. Sketches, photos, elevations, renderings and models are encouraged to illustrate architectural appropriateness as well as innovation.
2. Lighting—The type, design, location, function and intensity of all exterior lighting facilities shall be described. Attention given to safety, privacy, security, daytime and night-time appearance, light scatter shall be detailed. Consultation with the Public Works Department and Selectmen is recommended.
3. Landscaping—Provisions for landscaping shall be described, including type, location and function. Consultation with local Forestry Department and the Conservation Commission if applicable.
4. Visual—Explanation of how the proposed siting of buildings which have been chosen shall be given. Attention given to views to the site and from the site shall be described. Included shall be long-distance views as well as to and from adjacent properties. Visual impact may be related to the preceding sub-elements concerning the overall aesthetics of the proposed development.

G. A MASTER PLANS ELEMENT to detail the compatibility of the proposed development and its alternatives to established plans of record of the Planning Board, Conservation Commission and the Selectmen and other Town and State agencies as applicable. If not compatible, reasons therefor shall be detailed.

H. A Municipal Benefit/Cost Element—A primary part of this element shall be an analysis of the net benefit or cost of the proposed development to the Town in dollars, as complete as is practicable. This municipal benefit/cost analysis should follow standard and usual procedures and parameters for measuring both the benefits to be derived and costs to be incurred by the Town of Williamstown as a result of the implementation of the proposed development. It will be helpful to provide one or more benefit/cost analyses for alternative uses, such as other uses expressly allowed, or allowed by permit, by the Zoning By-Law or the retention of the land as open space, to provide a basis for comparison. Except in unusual cases, or when the construction of a proposed development is scheduled to take place in distinct and separate phases and each phase may be functional and operable without any or all of the others, the municipal benefit/cost analysis may assume full and complete development and occupancy. In phased development or in other unusual cases, the Planning Board may require more than one analysis (an analysis for each phase) and/or more than one environmental impact statement. This element may also estimate net benefits or costs of non-quantifiable environmental impacts.

The remaining three (3) sections of the environmental statement shall be in sufficient detail to enable the Planning Board to determine whether unavoidable impacts have been fully recognized; whether alternatives to the proposed development have been fully explored; and whether all reasonable measures to minimize adverse or unavoidable impacts (or maximize beneficial impacts) have been taken.

V. STANDARDS

In reviewing plans submitted in accordance with this By-Law the Planning Board shall consider the following standards:

A. PRESERVATION OF LANDSCAPE:

The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal. Any grade changes shall be in keeping with the general appearance of neighboring developed areas.

B. RELATION OF PROPOSED BUILDINGS TO ENVIRONMENT:

Proposed structures shall be related harmoniously to the terrain and to existing buildings in the vicinity that have a functional or visual relationship to the proposed buildings. Proposed buildings shall not obstruct a notable scenic view enjoyed from a public way.

C. DRIVES, PARKING AND CIRCULATION:

With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties. In all cases, walkways, drives, sidewalks and parking areas shall conform to other applicable sections of this By-Law.

D. SURFACE WATER DRAINAGE:

Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Storm water shall be removed from all roofs, canopies and paved areas and carried away in an underground drainage system. Surface water in all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic, and will not create puddles in the paved areas.

E. UTILITY SERVICE:

Electric, telephone, cable TV and other such lines and equipment shall be underground. The proposed method of sanitary sewage disposal and solid waste disposal from all buildings shall be indicated. Volume of waste and impact on public sewage disposal plant and on landfill shall be estimated. Recycling of glass, paper and metals shall be actively encouraged.

F. ADVERTISING FEATURES:

The size, location, design, color, texture, lighting and materials of all temporary and permanent signs and outdoor advertising structures or features shall not detract from the use and enjoyment of proposed buildings and structures and the surrounding properties. In all cases, signs and advertising fixtures shall conform to other applicable sections of this By-Law and to other Town By-Laws.

G. SPECIAL FEATURES:

Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties. In all cases, such buildings structures and areas shall conform to other applicable sections of this By-Law.

H. APPLICATION OF DESIGN STANDARDS

The standards outlined above under Paragraphs A. through G. shall apply to all accessory buildings, structures, free standing signs and other site features within the proposed development.

VI. EXPERT ASSISTANCE

The Planning Board shall have the authority, as appropriate to contract for professional services, such as of an engineer, urban designer or architect, to assist in developing criteria to be used in decision making or in evaluating a proposed development for compliance with SECTION V. The reasonable costs for said services shall be borne by the applicant in addition to any filing fee which shall be required.

VII. PROCEDURE

When an Environmental Impact Statement is required by this By-Law, *The Rules and Regulations Governing The Subdivision of Land*, or by a Town By-Law, a copy of such Statement shall be filed with the Planning Board at the same time as the application for approval thereunder is filed with the appropriate Town body.

The Planning Board shall act upon any Environmental Impact Statement in the manner and within the time period prescribed for the review and/or approval of plans submitted for approval under the Zoning By-Law and/or the Subdivision Control Law, as applicable, or take any other action in relation thereto.

(a) Purpose. The purpose of this section is to provide individual detailed review of certain uses and structures which have a substantial impact upon the character of the Town and upon traffic, utilities and property values therein, thereby affecting the public health, safety and general welfare thereof. The environmental impact and design review process is intended to promote the specific purposes listed in Section 1.0(a) of this By-Law.

(b) Application. In the following categories all new structures and outdoor uses, exterior alterations, exterior additions, and exterior changes which require a building permit under the Building Code shall require a special permit subject to the environmental impact and design review procedures and standards herein after specified:

- (1) Any structure or outdoor use on a lot any part of which fronts on or is within 100 feet of:
 - Beacon Street
 - Roylston Street
 - Commonwealth Avenue
 - Harvard Street
 - Washington Street
- (2) Attached dwellings in groups of three or more
- (3) designed groups of single-family dwellings as per Section 5.11(b)
- (4) multiple dwellings with 10 or more units on the premises, whether contained in one or more structures
- (5) lodging houses and hotels
- (6) gasoline service stations
- (7) outdoor automobile sales and storage for sales
- (8) non-residential uses in a non-residential district with more than 10,000 square feet of gross floor area or with 20 or more parking spaces
- (9) non-residential uses in a residential district with more than 5,000 square feet of gross floor area or with 10 or more parking spaces.

(c) Procedure. Applications for uses subject to environmental design review shall be submitted to the Building Commissioner and to the Board of Appeals in accordance with procedure for special permits specified in Section 9.3 and 9.4, including the requirements for public notice and hearing and referral to the Planning Board. In reviewing applications under this section, the Board of Appeals may require modifications, conditions and safeguards reasonably related to the environmental impact and design standards of this section.

To aid the Board of Appeals in making the findings required in Section 9.5 and the Planning Board in preparing the advisory report provided in Section 9.4, the applicant shall submit the following materials in addition to the usual drawings at the time of application:

(1) Model.

An inexpensive study model or final presentation model of a minimum scale of 1 inch equals 20 feet showing the tract, abutting streets, proposed contours, proposed buildings, and the massing of abutting buildings. (Not required for additions, alterations, or changes which increase gross floor area by less than 100 percent.)

(2) Drawing of existing conditions.

A drawing showing the location, type, size, or dimension of existing trees, rock masses, and other natural features with designations as to which features will be retained. In order to meet the conditions for approval of a special permit as specified in Section 9.5 all existing trees, rock masses, and other natural features shall be retained until a special permit is approved.

(3) Drawing of proposal.

- (1) Structure: a drawing indicating color and type of surface materials showing front and rear elevations, and side elevations where there are no adjoining buildings, and floor plans.
- (2) Landscape: a drawing showing the location, dimensions, and arrangements of all open spaces and yards, including type and size of planting materials, color and type of surface materials, methods to be employed for screening, and proposed grades.
- (3) Photographs.

Photographs showing the proposed building site and surrounding properties, and of the model (if required). Applications for alterations and additions shall include photographs showing existing structure or sign to be altered and its relationship to adjacent properties.

(4) Impact Statement.

Statement by applicant with explanation of how each of the environmental impact and design standards is incorporated into the design of the proposed development. Where a particular standard is not applicable, a statement showing existing structure or sign to that effect will suffice. An environmental impact statement prepared in accordance with state or federal regulations may be accepted as a substitute in lieu of this statement.

The report of the Planning Board to the Board of Appeals shall contain a specific evaluation of the application in relation to each of the standards listed in paragraph (d) of this section. The Board of Appeals shall not deny a special permit for any use or condition which requires a special permit solely because it falls into one of the categories listed in paragraph (c) of Section 4.10, unless it finds that the use or condition departs from the standards listed in paragraph (d) of this section to such an extent as to produce a serious adverse impact upon the character of the Town and upon traffic, utilities and property values therein, thereby adversely affecting the public health, safety and general welfare.

(4) Environmental Impact and Design Standards. The following standards shall be utilized by the Board of Appeals and Planning Board in reviewing all site and building plans. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the reviewing authority. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specification of one or more particular architectural styles is not included in these standards. The standards of review outlined in subsections (1) thru (12) below shall also apply to all accessory buildings, structures, freestanding signs and other site features, however related to the major buildings or structures.

(1) Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

(2) Relation of Buildings to Environment. Proposed development shall be related harmoniously to the terrain and to the use, scale, and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed buildings. The Board of Appeals may require a modification in massing so as to reduce the effect of shadows on abutting property in an S, SC, or T district or on public open space.

(3) Open Space. All open space (landscaped and usable) shall be so designed as to add to the visual amenities of the vicinity by maximizing its visibility for persons passing the site or overlooking it from nearby properties. The location and configuration of usable open space shall be so designed as to encourage social interaction, maximize its utility, and facilitate maintenance.

(4) Circulation. With respect to vehicular and pedestrian circulation, including entrances, ramps, walkways, drives, and parking, special attention shall be given to location and number of access points to the public streets (especially in relation to existing traffic control and mass transit facilities), width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties.

(5) Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Storm water shall be removed from all roofs, canopies and paved areas and carried away in an underground drainage system. Surface water in all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic, and will not create puddles in the paved areas.

(6) Utility Service. Electric, telephone, cable TV and other such lines and equipment shall be underground. The proposed method of sanitary sewage disposal and solid waste disposal from all buildings shall be indicated.

(7) Advertising Features. The size, location, design, color, texture, lighting and materials of all permanent signs and outdoor advertising structures or features shall not detract from the use and enjoyment of proposed buildings and structures and the surrounding properties.

(8) Special Features. Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties.

(9) Safety. With respect to personal safety, all open and enclosed spaces shall be designed to facilitate building evacuation and maximize accessibility by fire, police, and other emergency personnel and equipment. Insofar as practicable, all exterior spaces and interior public and semi-public spaces shall be so designed as to minimize the fear and probability of personal harm or injury by increasing the potential surveillance by neighboring residents and passersby of any accident or attempted criminal act.

(10) Heritage. With respect to Brookline's heritage, removal or disruption of historic, traditional or significant uses, structures, or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.

(11) Microclimate. With respect to the localized climatic characteristics of a given area, any development which proposes new structures, new hard-surface ground coverage, or the installation of machinery which emits heat, vapor, or fumes, shall endeavor to minimize, insofar as practicable, any adverse impact on light, air, and water resources, or on noise and temperature levels of the immediate environment.

(12) Specific Standards for Beacon Street.

(1) A front setback may be required greater than would be required under Section 5.54(b), if deemed necessary to preserve the line of existing facades where this is essential to the purposes of this Section.

(2) Where preservation of the existing roof or cornice line of adjoining buildings is considered necessary to the preservation of the desirable visual quality and property values of a particular part of Beacon Street, conformance with that roof or cornice line may be required; or, in the case of new buildings permitted to be taller than such adjoining buildings, a setback of the building may be required at the level of the adjoining roof or cornice line.

(3) Where the nature of the following design features is considered significant to the preservation or enhancement of the desirable visual quality and property values of a particular part of Beacon Street, any new structure or alteration shall be harmoniously related to nearby pre-existing structures in terms of color, materials, scale, and such design elements as door and window size and location, in addition to signs, setbacks, roof and cornice line, and other major design elements.

EASEMENT-EXAMPLE

LICENSE AGREEMENT

In consideration of the mutual promises herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Licensor and Licensee hereby agree as follows:

1. Lessor hereby grants to Licensee a nonexclusive license for the use, subject to the terms and conditions hereinafter contained, of the property shown on the plan attached hereto (the "Premises").

2. The Premises may be used by Licensee for the planting and maintenance of trees, bushes and shrubs as shown on the attached plan. All of such improvements shall be made at the sole expense and risk of Licensee, and upon termination of this Agreement such improvements may be removed by Licensee, in which event Licensee shall restore the Premises to their original condition, reasonable wear and tear excepted.

3. Licensee covenants that it shall not use the Premises, nor suffer the Premises to be used, for any purposes other than as aforesaid and shall not permit, commit or suffer waste or impairment of the Premises.

4. The term of this Agreement shall commence on the date hereof and terminate on that day which is two (2) years from the date hereof unless Licensee gives Lessor notice of its desire to extend the term in which the event the term shall be extended for an additional period of two (2) years.

5. Notwithstanding the provisions of paragraph 4, this Agreement may be terminated by Lessor or Licensee upon giving sixty (60) days prior notice to the other party.

6. Licensee shall cause any contractor that plants such trees, bushes or shrubs to maintain insurance indemnifying and holding harmless Lessor from and against any and all claims, demands, suits actions, judgments, costs or expenses in any manner arising out of the use of the Premises by such contractor.

7. Any expense incurred by Licensee in connection with its use of the Premises shall be the sole responsibility of Licensee, and there shall be no liability on the part of Lessor as a result of the incurrence of any such expense.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

LICENSOR:

BY _____

APPROVED AS TO LEGAL
FORM AND CHARACTER:

LICENSEE:

BY _____

City Solicitor or
Town Counsel

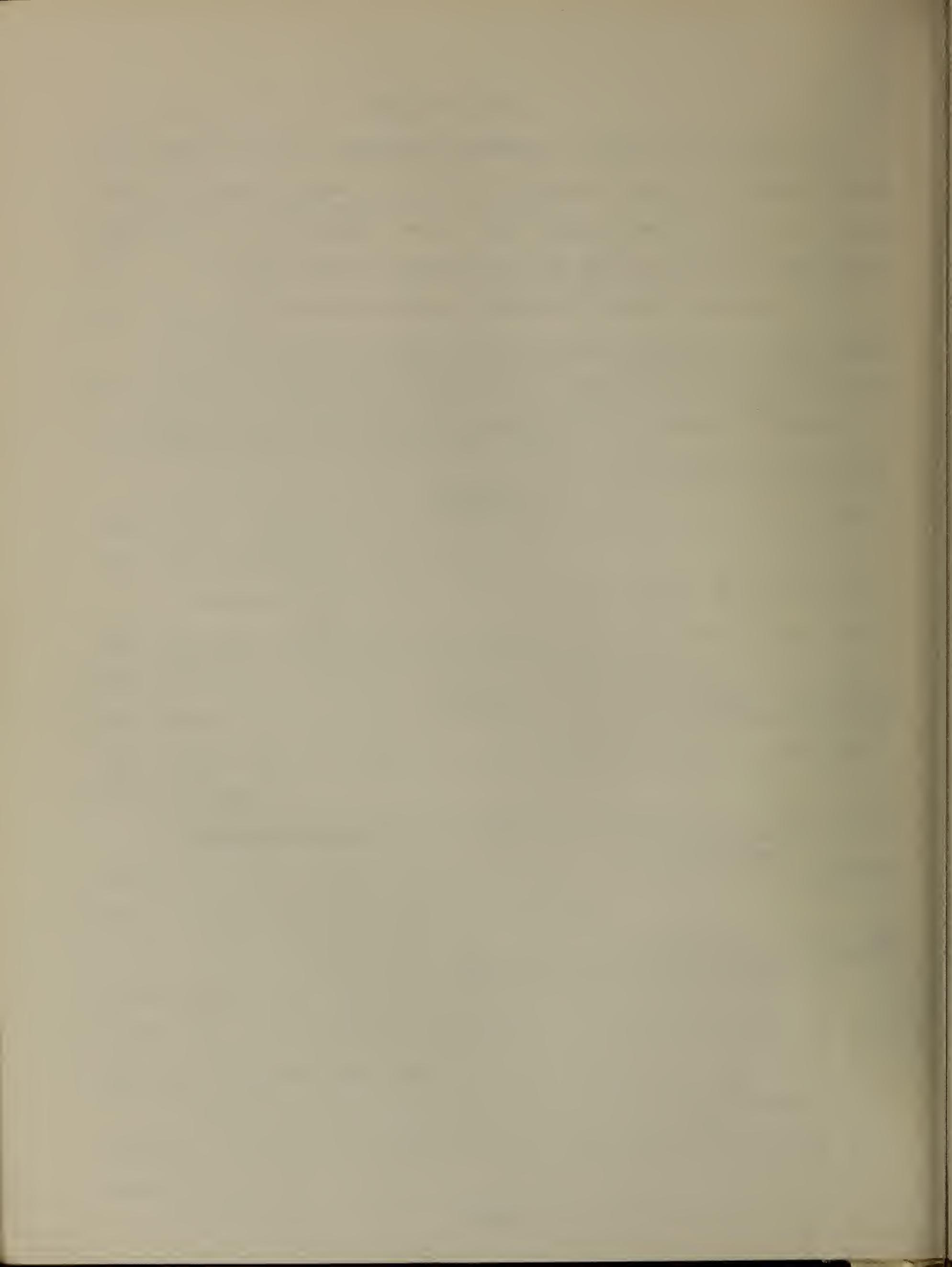
BY _____

City or Town Manager

APPROVED:

BY _____

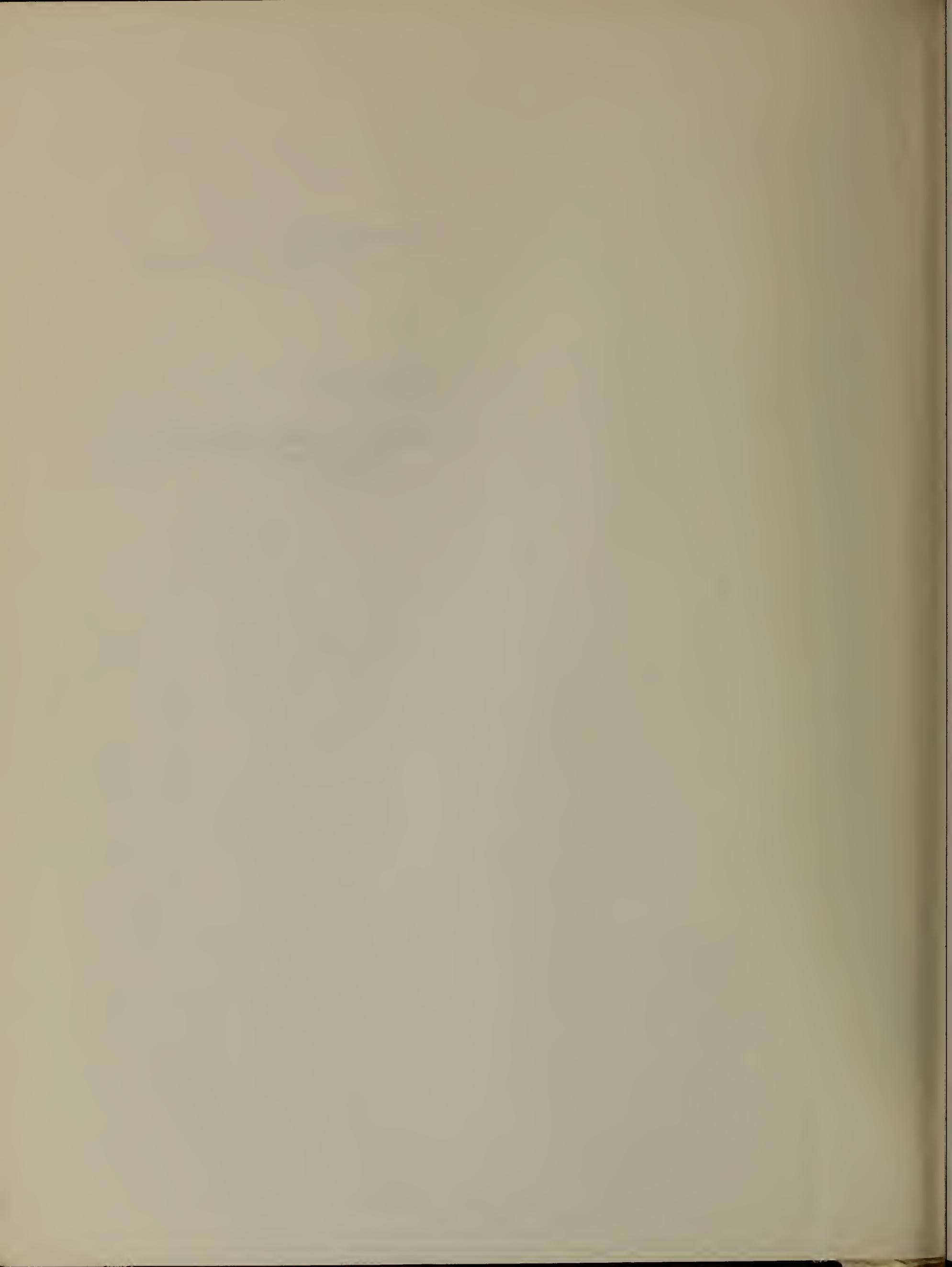
Title: Mayor of the City
or Chairman of the Board of Selectmen



ATTACHMENT D
SUPPORTING DOCUMENTS

RESOLUTION

SAMPLE LETTER FROM TOWN TO
THE DEPARTMENT OF PUBLIC
WORKS



RESOLUTION

Whereas, Williamstown is the first Town in the Commonwealth visited by many tourists from the west and from Vermont;

Whereas, the business district in Williamstown on Route 2 is the first business area in the Commonwealth visited by these tourists;

Whereas, the many highway cuts have created an unsafe condition;

Whereas, the area is not attractive; and

Whereas, the area has been the case study area in a Study entitled "Improving Highway Business Areas", sponsored by the Massachusetts Department of Community Affairs as part of the Local Planning Assistance Series,

Whereas, this study recommended solutions to the problems of this Business Area,

It is the sense of the Town that the Massachusetts Department of Public Works be requested to undertake an Engineering Design Study of the area based on the findings of the above study.

SAMPLE LETTER

Commissioner
Department of Public Works
100 Nashua Street
Boston, Mass.

Dear Commissioner:

Route 2 in the Town of Williamstown was the case study area for a study as part of the Municipal Technical Assistance series of the Division of Community Services of the Massachusetts Department of Community Services of the Massachusetts Department of Community Services.

The recommendations contained in the report were developed with the cooperation of local officials and boards and with cooperation from your Department.

The Planning Board and Board of Selectmen endorse Alternative One presented in the report and request that the Department implement it using the recommendations of the report as a base.

We assure you of the cooperation of all Town Officials and of the consultants.

Sincerely,

TOWN OF WILLIAMSTOWN

EVALUATION SURVEY
DCA IN-DEPTH STUDY PROGRAM

The Department is conducting an evaluation survey of its in-depth study program and requests recipients of this report to evaluate its effectiveness. It would be greatly appreciated if you would take a few minutes of your time to complete the following survey form, and return it to:

Massachusetts Department of Community Affairs
Office of Local Assistance
1 Ashburton Place - Room 1619
Boston, Massachusetts 02108

For all the following questions, please place appropriate letter rating in the column indicated. The letter ratings are:

A - High or Excellent
B - Above Average or Good
C - Fair or Average
D - Poor or Below Average
N/A - Not Applicable

Title of Report: IMPROVING HIGHWAY BUSINESS AREAS - WILLIAMSTOWN	Letter Rating
1. Applicability to your constituents' or community's problems/issues/concerns.	
2. Usefulness to your constituents or community in:	
a. Solving problems/issues;	
b. Providing insights to problem solving;	
c. Catalyzing local officials' action;	
d. Stimulating local discussion and providing focus.	
3. Adequacy of subject matter treatment	
4. Quality of writing and readability	
5. Quality of graphic material	
6. Adequacy as a self-teaching or "how to" manual	
7. Timeliness of subject matter to current local issues	

8. Is follow-up by DCA staff to discuss the content of this report necessary? _____ not necessary? _____. If necessary, would group training seminars be acceptable? Yes _____ No _____. Prefer individual meetings and discussions Yes _____ No _____. Other _____

9. Should the in-depth study program continue? Yes _____ No _____. If no, please indicate reason.

10. Should the in-depth study program continue? Yes _____ No _____. If yes, what would you suggest?

11. What was your reason for requesting the report?

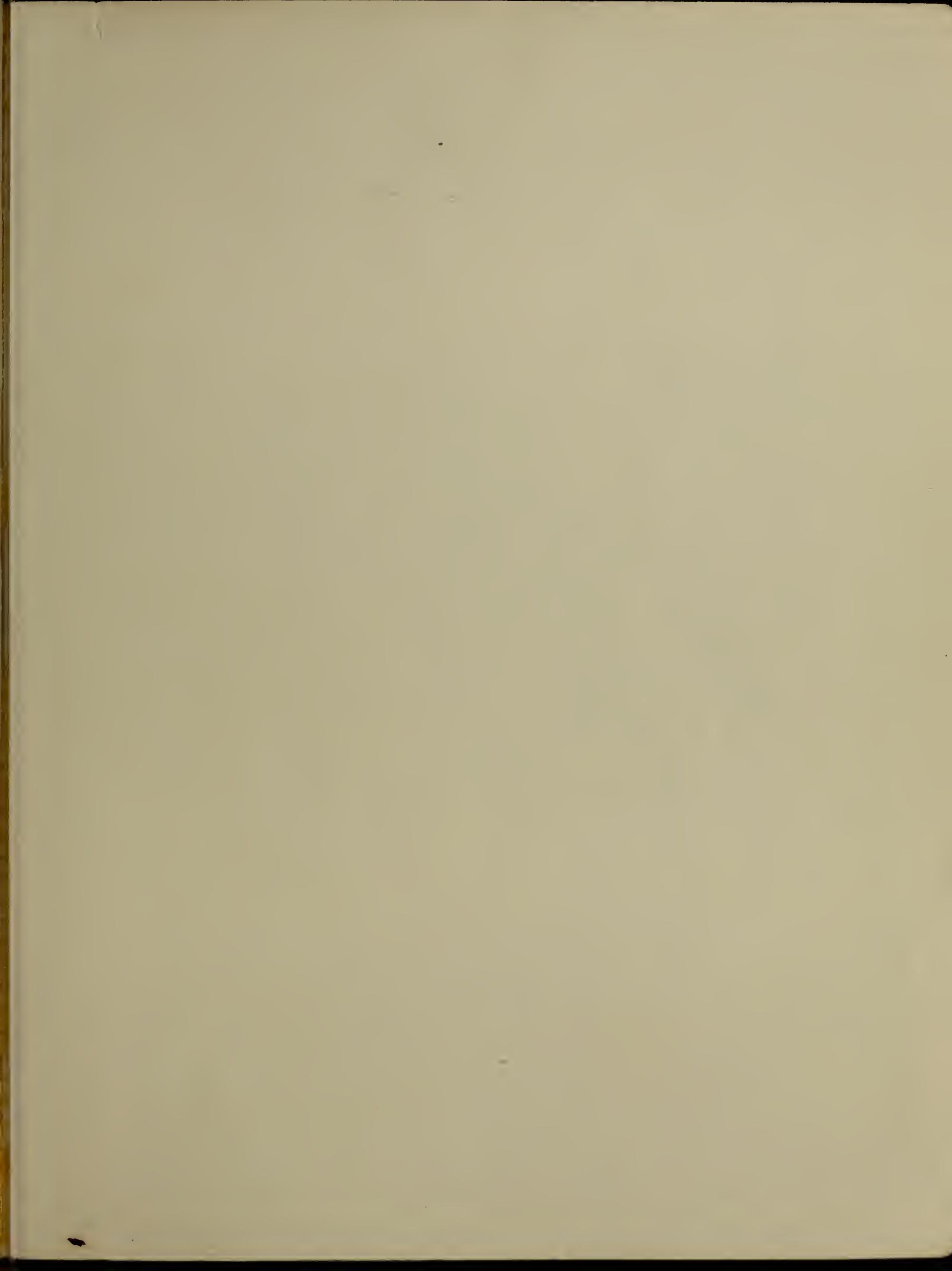
12. Other comments/ remarks:

13. Optional:

Name: _____

Address: _____

Telephone: _____



LOCAL ASSISTANCE SERIES

NO. 1 ESTABLISHING DEPARTMENTS OF COMMUNITY DEVELOPMENT:
PEABODY

NO. 2 PRESERVING AGRICULTURAL LAND: WESTFIELD

NO. 3 EVALUATING DEVELOPMENT IMPACT: CHELMSFORD

NO. 4 DEVELOPING A LAND USE MANAGEMENT PROCESS: MASHPEE

NO. 5 ORGANIZING FOR ECONOMIC DEVELOPMENT: WAREHAM

NO. 6 MONITORING CHANGE IN RESIDENTIAL NEIGHBORHOODS: MELROSE

NO. 7 REVITALIZING SMALL TOWN CBD's: MILLBURY

NO. 8 EVALUATING REUSE OPTIONS FOR LARGE INSTITUTIONAL LAND
HOLDINGS: LENOX

NO. 9 MODERNIZING LOCAL GOVERNMENT: LEICESTER

NO. 10 PLANNING AND DEVELOPING SMALL HARBOR AREAS: NEWBURYPORT

NO. 11 MANAGING DEBT AS A COMMUNITY RESOURCE: HAVERHILL

NO. 12 DEVELOPING A LOCAL COMPREHENSIVE PERMIT SYSTEM:
BRIDGEWATER

NO. 13 PREPARING A DEVELOPMENT CONSTRAINTS INFORMATION SYSTEM:
EASTHAMPTON

NO. 14 MANAGING SEASONAL NEIGHBORHOODS IN TRANSITION:
LAKEVILLE

NO. 15 IMPROVING HIGHWAY BUSINESS AREAS: WILLIAMS TOWN

* A GUIDE TO CITIZEN PARTICIPATION (SUPPLEMENT)

COPIES OF ANY OF THESE REPORTS MAY BE OBTAINED FROM:

OFFICE OF LOCAL ASSISTANCE
ONE ASHBURTON PLACE
BOSTON, MASSACHUSETTS 02108
TEL.: (617) 727-3253 or
TOLL FREE 1-800-392-6445

